TOWARDS A SOCIAL CONSTRUCTIVIST GAME-BASED LEARNING MODEL: A CASE OF USING DIGITAL GAMES IN SPORT STUDIES IN SOUTH AFRICA

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ABSTRACT

Until the advent of democracy in 1994, apartheid education in South Africa was segregated along the lines of race and ethnicity, consequently disadvantaging historically Black universities. The implications of an undemocratic system meant that the educational experiences of students from historically disadvantaged education systems might be compromised. The impetus for this study arose from observations that students in a sport studies classroom were not engaging with one another, as they were organising themselves with peers from the same cultural group in classroom. While literature asserts that student engagement is linked to student success, explicit views of cross-cultural engagement fall short in the South African context.

This study avers that traces of historically segregated cultures and sub-cultures are evident in a diverse institutional space. As diverse groups of students enter the classroom, it has been observed that they tend to gravitate toward peers from the same cultural groups. While a diverse classroom should create a culturally rich environment for knowledge building, through collaboration and engagement with peers, the diversification in the classroom hindered engagement and interaction, as well as knowledge sharing and cross-cultural student engagement. Knowledge, therefore, is generated and shared in cultural clusters, instead of across cultural clusters. The aim of this study is to develop a social-constructivist game-based learning model, by critically exploring the production and reproduction of cross-cultural interactions, using emerging technologies in sport studies.

Game-based learning is regarded as a promising vehicle to facilitate students' active participation and engaged learning. This study, therefore, focused on digital games, wikis and blogs, as tools to transform social practices that impede cross-cultural engagement. Since sport is seen as a vehicle for social change, it may create a space where cross-cultural interactions can take place, thereby promoting social change and cohesion in a sport studies classroom. This study employed a sequential exploratory mixed method approach.

The research approach involved the design and development of a digital game, which was then tested during the pilot phase of the project. After verification of the tool by the pilot study participants, data were collected from two cohorts of a sport studies discipline, across two

phases of this study. This meant that the digital game functioned optimally without any malfunction. This involved 106 participants from a total population of 171 students. Phase One comprised a digital game-based intervention only. Phase Two comprised a game-based learning intervention, an authentic wiki task and a reflective blog. In order to determine the effect of the intervention on cross-cultural engagement, both quantitative and qualitative data were collected. Quantitative data consisted of validated pre- and post-test questionnaires. Quantitative data was analysed using inferential and descriptive statistics on SPSS v20. A repeated measures ANOVA was conducted on the data. Qualitative data comprised five focus group discussions and 58 reflective blog entries. Qualitative data were captured, coded and analysed using Atlas TI.

The findings of the quantitative data reveal that there are distinct group preferences, which are linked to historical legacies of segregation, including socio-geographic containment. Cross-cultural interactions are informed by mental traces, based on prior experiences, hindered by alliances. In addition, interaction preferences are linked to cross-cultural engagement. Structures that informed students' understanding of interactions were produced and reproduced as cross-cultural interaction was elevated because of group interaction.

This study found that students drew on material resources, such as digital games, wikis and blogs to make sense of their interactions, which resulted in the reproduction and modification of rules (modalities), in order to recursively reproduce their social actions. This study concludes that games, alone, do not facilitate cross-cultural engagement, but need to be augmented with other technology tools, in order to produce and reproduce social practices of cross-cultural engagement in the classroom. This study also offers a theoretical contribution, in the form of a social-constructivist game-based learning model, to address cross-cultural interactions in the classroom.

KEYWORDS

Game-based learning

Emerging technologies

Sport studies

Wiki

Blog

Structuration theory

Authentic learning.

DECLARATION

I declare that *Towards a social-constructivist game-based learning model: a case of using digital games in sport studies in South Africa* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used, or quoted, have been indicated and acknowledged by complete references.

Full name: Simone Titus

Date: August 2016

Signed by candidate

Signature Removed

Signed: ……

DEDICATION

Mom, thank you for all the love

To Sarah Mae. You are my heart. I love you always, dear daughter.

ACKNOWLEDGEMENTS

Thank you Lord!!! I did this through your grace. All glory and honour to You for anointing me. Your love fills me and moves me to do things I could not dream of. Imagine, a girl from Mitchells Plain, out of the hood, achieving a Doctorate. This is evidence that God can dream a bigger dream for you, than you can ever dream for yourself. Believe it. I did.

To my family for their support during the process, especially my mom, who has always been supportive, motivating and encouraging through the process. I love you to the ends of the earth. To my extended family, especially my cousins for spurring me on to 'get done.'

To my 5-year-old daughter Sarah Mae. You were 2 when I started this and one day you will understand why I needed to write a 'book'. Thank you for understanding that: 'Mommy is busy now and you cannot watch a movie on my laptop baby. Maybe later, okay.'

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CHAPTER ONE

INTRODUCTION

1.1. Introduction

The motivation for this study stem from the researcher's observations as an educator that students in a sport studies class were not engaging with peers from different cultures, but were instead situating themselves with peers of the same cultural group. The assertion of this study, therefore, is that the historical legacy of segregation during apartheid in South Africa has been indoctrinated into the unconscious minds of students in higher education, as evidenced by their interactions with peers in a multicultural classroom setting. Giddens (1984) connects the unconscious to memory that affects the day-to-day actions/interactions of individuals. To this end, memory is about organizing the past in relation to the present (Giddens, 1996). Although apartheid policies have been abolished, the traces of the legacy of segregation are still inadvertently manifested in the behaviours of students of modern higher education institutions in South Africa.

Although current students, commonly referred to as 'born-frees' (Cronje, 2015), did not experience the trauma of apartheid themselves, they still exhibit poor success and throughput rates in the higher education system (Scott, Yeld & Hendry, 2007). While literature reveals that student engagement is linked to student success (Strydom, Mentz & Kuh, 2010), an explanation of cross-cultural engagement falls short in the South African context, which limits the understanding of interactions in a cosmopolitan classroom as a pedagogical approach to engagement. It is, therefore, the contention of the researcher that, while operating in groups with cultural similarities, knowledge is produced in homogeneous cultural groups and not shared across cultural groups. This is particularly of concern in South Africa as there is a need to contribute to a knowledge economy which exists within a multicultural setting. This may advance the social and economic agenda of the country. For the purposes of this study, groups with cultural similarities will be called *cultural clusters*.

Cultural clustering hinders cross-cultural interactions of students in the classroom. However, it is possible that the use of digital games will offer conditions that may reshape social actions

related to cross-cultural interaction. Veletsianos (2010) avers that the affordances of emerging technologies are perceived to foster engagement and interaction. Bowers (2008, p. 14) offers an operational definition of 'affordances of emerging technologies' in higher education. He asserts that affordances refer to the 'methodology that concentrates directly on the critical aspects of the selection process: underlying features of tools and the cognitive and collaborative requirements of learning tasks'. The affordances of emerging technologies, therefore, offer underlying features, which include opportunities for interaction and engagement as a collaborative requirement. In this current study, the emerging technologies of digital games, wikis and blogs was used to explore how cross-cultural interactions are produced and reproduced in a sport studies classroom at an institution of higher learning in the Western Cape Province of South Africa.

This opening chapter offers an outline of the context of education in South Africa, followed by the historical barriers and its implications on student engagement. The problem statement is presented, followed by the research questions, aims of the study, specific objectives and significance of this study. A summary of the research methodology and the interpretation of key terms are also offered, as well as a chapter outline for this thesis.

1.2. The context of education in South Africa

Until 1994, the apartheid system of education was segregated along the lines of race and ethnicity, thereby invariably disadvantaging historically Black institutions of learning. At the time, the Black majority was dispensed with an education system that was centrally controlled, separate, less costly, and of a lower quality (Crouch, Gustafsson & Lavado, 2009). This historical phenomenon has created a challenging space for post-1994 policy (Badat, 2009) because it would require context specific approaches that take into consideration the circumstances of various historically disadvantaged groups, in order to achieve broader representation (Henrard, 2002). Considering these institutional histories, it is essential to create opportunities that affect the redress-centred developmental strategies of all higher education institutions, in order to facilitate equity and access. The White paper on Higher Education (South Africa, Department of Education, 1997) has been one of the most noteworthy higher education policy documents of the 1990s and is a key factor in this process. This document lays emphasis on the broadening of access to higher education for all, while being underpinned by the need to create a knowledge economy that may affect the global economic market needs

of the country, as a whole. However, students generating knowledge in homogenous cultural groups may obstruct policy objectives, geared toward constructive knowledge production in the country. In addition, the South African Qualifications Authority Act (No 58 of 1995) highlights attributes and outcomes that programmes offered at higher education institutions should achieve. Subsequent marked changes to this document aims to 'accelerate and redress past and unfair discrimination in education, training and employment opportunities' (Republic of South Africa [RSA], National Qualifications Act [67/2008], 2014, p. 6)

The historical consequences of the apartheid system on the country's higher education system has been significant, since the post-1994 public schooling system is widely acknowledged to have failed (CHE, 2007). Therefore, the majority of schools open to Black[1] learners continue to be marked by the sort of conditions that were characteristic to apartheid (Bozalek & Boughey, 2012). The impoverished nature of the educational experiences offered to learners from historically disadvantaged schools at secondary level are compounded by the conditions related to teaching and learning at tertiary level (Bozalek & Boughey, 2012; Soudien, 2010).

The institution under study is no different. The remnant of the cultures and sub-cultures by which the people in South Africa were previously segregated, are evident as the diverse institutional spaces are experienced differently by different groups of students (Ravjee, Hames, Ludwig & Barnes, 2010). Under the apartheid system, institutionalised inequities were characterised by educational, financial, material and geographical advantage and disadvantage (Badat, 2010). Higher education institutions were also segregated based on race and were only allowed to offer educational programmes that were considered socially appropriate by the apartheid government (Bozalek & Boughey, 2012; Bunting, 2006). In addition to institutional segregation, a historically Black university would offer programmes, such as, public administration and nursing, rather than political philosophy and medicine (Bozalek & Boughey, 2012). Race, class and stratification in the system were further entrenched because of tiered access into various institution structures based on performance. Therefore, students who were disadvantaged by their educational background might not have gained access into top research institutions or high-level academic and professional programmes for which these privileged institutions were known (CHE, 2007). Although the issue of accessibility is not

[1] During the apartheid era, racial classification was legislated under the Population Registration Act No. 30 of 1950. As a result, the South African population was divided into three main racial groups: Whites, Blacks, Indians and Coloured people (people of mixed race).

being put into question in this study, the remnants of an inequitable, racially qualified system, as well as its impact on the way that students interact in a culturally diverse, modern higher education system, are highlighted. Giddens' Structuration theory (Giddens, 1984) has been used to elucidate how a previously divided education system has embedded itself in the subconscious of 21st century sport studies students and, consequently, is influencing cross-cultural engagement. Structuration theory posits that the actions of human agents are set in routines, practices and rules, which over time become embedded in everyday life (Giddens, 1984). This theory was selected because it provides a language conduit to express and describe the social phenomenon of cross-cultural interaction

Remarkably, the apartheid system has been abolished for 25 years; however, its effect on the minds of students, who may not have directly experienced its trauma, continues. The legacy of segregation that impregnated the entire social fabric of South Africa is still currently manifested in terms of race, class and ideology (Karodia, Shaikh & Soni, 2015). To this end, the traces of the apartheid ideology on the minds of students are extraordinary, as demonstrated when they unintentionally segregate themselves in social institutions, such as classrooms. The impact of these actions may hinder progress aimed at redress and, therefore, it is important to understand how the legacy of apartheid has been embedded in the subconscious mind of students in higher education, as well as how it reproduces actions that reinforce the existing social system. This study was conducted at a higher education institution which was established in the 1970 in the Western Cape Province of South Africa. In the early 1960s, under the apartheid era and in accordance with the ideology of segregated societies, the state opened a number of institutions that catered for 'other' race groups, including the institution under study (CHE, 2010).

Following equitable dispensation, the first democratically elected government inherited an education system that was still fraught with inequalities. Bozalek and Boughey (2012) noted that these inequalities were along the lines of race, the type of higher education institution, location and language instruction. As a result, higher education institutions still have remnants of the historical divide, based on population groups, which is still visible in tertiary settings today (Badat, 2010; Odhav, 2009; Treiman, 2006). This study, however, will attempt to offer insight into the reasons that these social practices are perpetuated, produced and reproduced in a higher education setting.

One primary success fundamental to South Africa's transformation of the undemocratic system of apartheid, was the establishment of a quality, equitable and democratic education system to all South Africans (Sayed & Motala, 2012). Policies since 1994 have, therefore, directed the development of a sound system that should provide quality education to all South Africans to address the social and economic needs of society (Bozalek & Boughey, 2012). However, policies have done little to reshape social transformation in the classroom, which remains a concern. Badat (2010) argues that social transformation in higher education is necessary if redress is to be achieved. This being said, the transformative underpinnings of policies governing higher education should favour students who have been disadvantaged by an unjust system, as there is broader access to tertiary education opportunities. This bodes well for achieving equitable dispensation; however, the injustices are manifested in the classroom, as students still unconsciously group themselves with peers from similar cultural backgrounds. While the diverse classroom setting provides a rich opportunity for social cohesion, the lack of cross-cultural engagement is influenced as knowledge; ideas and thoughts are generated within the cultural clusters, but not shared across clusters. This may have negative consequences, as the opportunity to learn and experience differing perspectives, other than their own, may be lost. In addition, the consequences of cultural clustering may create conditions that perpetuate the social actions of students in a cosmopolitan classroom. Giddens (1979) contends that people follow rules modelled in social structure, where a collective understanding of social rules is the condition of social action. Therefore, it is important to challenge the status quo and disrupt the current social practices being observed in the classroom, in order to enlighten and enrich the educational experience through cross-cultural engagement.

Not much has changed to date, as the proportion of people living in poverty had not changed significantly between 1996-2001 (Mouton, Louw & Strydom, 2012; Leibbrandt, Woolard, Finn & Argent, 2010; Van der Berg, 2002;). Social inequalities, such as poverty, systematically impede access to higher education, as they have the potential to reflect and shape social inequalities of class. Therefore, obtaining a worthwhile education is perceived as an opportunity to escape from poverty (Mouton, Louw & Strydom, 2012). Although it is estimated that more than half of the population lives in poverty (Grant, 2015; Statistics South Africa, 2015), there is still a major drive toward economic growth and development, however, without a knowledge base, the attainment of growth and development may not be achieved. In order to be competitive on the global stage the South African higher education system is expected to

produce more highly skilled and qualified graduates in particular fields, despite the relative lack of improvement in the current schooling system (Knijn & Patel, 2012).

Although there may have been significant investments made towards the provision of basic education, there are still major inequities with regard to access and educational achievement among various population groups (Knijn & Patel, 2012). Unfortunately, due to the diverse nature of the student population, the inequities are further compounded by the challenges faced with regard to student performance. The Council for Higher Education is of the view that considerable diversity in the system does not allow for a single educational process to be realised, because the inequities related to educational background, favours certain student groupings over others (Council for Higher Education [CHE], 2007). The contentions raised in this study are linked to the idea that some student groupings have an advantage over others in the classroom, especially if they are learning in homogeneous groups, as is the case in sport studies. This advantage is related to historical benefits that people from elite and wealthy groups enjoy with their access to privileged schools and high-ranking universities, which offer better education than the less endowed segments of the society (Southall, 2016). It makes sense that students who study at affluent schools are more enabled to reach their full potential than those who attend schools in historically disadvantaged communities, as the scope of their educational opportunities are broader, as are the range of resources, with better facilities, teachers and staff. Therefore, when entering tertiary settings, the cultural clusters they unconsciously align themselves with may generate superior knowledge over disadvantaged groups, and thereby reinforce knowledge construction that is not shared across groups.

In order to address the disparities in performance of different population groups, the national government of South Africa has resolved to broaden the range and scope of educational developments used in different higher education structures (Republic of South Africa, Department: The Presidency, 2011). These may be useful in addressing equity in development strategies by higher education institutions (CHE, 2007). In addition, it is the contention of the researcher that there is a need to expand educational developments by offering opportunities to engage in a diverse classroom setting. This may be achieved by using educational technologies to address problems of poor performing students, due it its ubiquitous nature. One way to do this is by redesigning tasks in the sport studies curriculum to accommodate the needs of all students and to enable them to be better engaged. One notable activity that engages many individuals is digital games (Hamari, Shernoff, Rowe, Coller, Asbell-Clarke & Edwards, 2016;

Brynen & Milante, 2012; Otta & Tavella, 2010). Therefore, a strategic shift toward game-based learning environments has been made, as it offers a rich experiential learning space that makes provision for cooperative interactions (Squire, 2008). In addition, games are effective because they embody what learners are doing, in terms of their interaction as they play the game, not because of what the game is (Van Eck, 2006). Therefore, the introduction of innovative game-based learning strategies may assist in achieving a more equitable method of constructing knowledge, by interacting with each other in a culturally diverse classroom.

In concordance with its global counterparts, South African higher education is compelled to improve access to students from diverse groups and offer programmes, which allow students to meet intended outcomes that are congruent with a rapidly changing society (Jaffer, Ng'ambi & Czerniewicz, 2007). This presents a challenge, as formal access to higher education by diverse groups was only addressed in the late 1980s (CHE, 2009). It is further challenging as participants in this study are enrolled at an institution where students are mostly recruited from less wealthy sectors of the society, have had poorer schooling and less access to resources than a typical student from a more affluent sector of society (CHE, 2009). Therefore, improving access to students from diverse groups represents a social justice issue, as it would improve mobility of graduates, who have the potential to contribute to the knowledge economy of the country on a broad scale.

Globally, many academics allow for the generation of knowledge within a particular discipline, which very often tend to be isolated from the 'real world' problems (Winberg, 2006). Consequently, traditional, discipline-specific academic knowledge is increasingly perceived as unable to address issues of importance to South African society, where only seven (7%) per cent of the population holds degrees in this developing country (Winberg, 2006). This study offers students an opportunity to engage in the 'real world' contexts using an online task, which integrates the principles of authentic learning (Herrington, Reeves & Oliver, 2010). Online activities encourage engagement and active learning (Herrington, Reeves & Oliver, 2006). Authentic learning is a developing strategy, used in a variety of higher education programmes, where tasks are designed to reflect the kind of activities that people do in the real world (Herrington, Reeves & Oliver, 2009), therefore, making learning and generation of knowledge less abstract. This begs the question, "Are graduates able to contribute significantly to the knowledge economy toward social, developmental and global reform?" It is contended that the incorporation of authentic learning principles might offer an effective and innovative way to

address the question at hand. Thus, the incorporation of authentic learning principles, which offer students a real world context, they may also be better prepared for the workplace after they graduate.

Another challenge in higher education is the under preparedness of students entering the system that has garnered much attention from educationalists, as being a factor for poor performance (CHE, 2007; Jaffer, Ng'ambi & Czerniewicz, 2007; Scott, Yeld & Hendry, 2007). One way to address this is through the improvement of engagement, as it is a key indicator for student success (Strydom & Mentz, 2010). This study argues that in South African higher education, while much attention has been given to the benefits of student engagement (Strydom & Mentz, 2010; Strydom Mentz & Kuh, 2010), not much attention has been cast on how students engage in a diverse classroom setting; ideally in a manner that could be seen as cross-cultural engagement. Furthermore, the observation that students choose to associate with peers of similar social and cultural backgrounds, raises the question to which mental traces of the former segregated social system are embedded in their minds and manifested through actions of segregation. One way to explore this phenomenon is to interrogate cross-cultural engagement using emerging technologies, such as digital games, wikis and blogs. The reason for the lack of cross-cultural engagement is unclear and difficult to investigate; however, this study critically explores the production and reproduction of cross-cultural interactions using emerging technologies in sport studies.

1.3. Historical barriers to student engagement and cross-cultural interaction.

Poor throughput and unsatisfactory graduation rates at tertiary institutions in South Africa remain a serious concern in higher education (Scott, Yeld & Hendry, 2007). Success rates of students attending higher education institutions in South Africa are undesirable and, despite increased intake of students, universities have been less successful at providing conditions and learning experiences conducive to the success of students, particularly those of historically disadvantaged schooling backgrounds (Johnson, Adams Becker, Cummins, Estrada, Freeman & Ludgate, 2013; Strydom, Mentz & Kuh, 2010; Badat, 2008). There has also been an increase the numbers of students from diverse backgrounds and ethnic groups registering at tertiary institutions, many of whom are the first of their family to attend university (Strydom & Mentz, 2010), which has affected the unsatisfactory throughput rates in South Africa, as illustrated by Scott, Yeld and Hendry (2007).

However, the success of students is linked to student engagement (Strydom, Mentz & Kuh, 2010). Therefore, if student engagement improves academic performance, under which social learning conditions could student engagement be improved, in order to achieve better academic outcomes? Innovative and novel teaching approaches, such as the use of emerging technologies in the classroom, may have a positive effect on engagement, as students in the 21st century could potentially learn the desirable skills to navigate through tasks in online spaces with the suitable support in place. In South Africa, student engagement has been identified as an important indicator of student success and is useful in understanding students' perspective of their learning experiences in higher education settings (CHE, 2010). Consequently, student engagement is defined as the 'time and energy students devote to educationally purposive activities and the extent institutions employ effective education practices to induce students to do the right thing' (Strydom, Basson & Mentz, 2010, pp. 10). However, in the sport studies classroom, where this research has been conducted, the educational activities offered to students may not explicitly induce cross-cultural interaction. Classroom engagement surveys, which have been validated by Strydom, Mentz and Kuh. (2010) take into account the following across six scales;

- *educational practices* that measure engagement activities of the individual with regard to the educational activities;
- *cognitive skills* that measure integration of ideas, facts and methods;
- *other educational practices* that account for the amount of time taken to engage in meaningful activities, such as lab work, tests, revision and so forth;
- *class atmosphere* that measure how much students enjoy group work, the challenging content of the module and how well students follow lectures in the module;
- *supplementary learning activities* that measure any additional academic learning activities, such as clinical teaching, fieldwork, internships etc. and lastly,
- *demographics*.

Although this instrument gathers information about engagement in the South African higher education classroom, there is no reflection, measurement, or insight offered for the production and reproduction of practices that inform engagement in a diverse classroom setting. This highlights a gap in understanding of how cross-cultural interaction, produced and reproduced in a classroom that is rich with diversity is measured. Additionally, by increasing student

engagement, there is a likelihood of minimizing apathy in the classroom and thereby improving learning and academic performance (Aronson, Janke & Traynor, 2012). Moreover, engagement is an aspect of teaching, learning and discovery in a way that enhances learning through its focus on knowledge enterprise (Fitzgerald, Bruns, Sonka, Furco & Swanson, 2012). Angelino and Natvig (2009) indicate that engagement might be one strategy that could be used to address retention and successful throughput in higher education institutions. Therefore, underpinned by constructivist thinking, cross-cultural engagement may create a more conducive learning space for students in higher education as it provides better prospects for collaborative interaction and learning.

One way to offer "effective education practices", and consequently improve student engagement as Strydom and Mentz (2010) postulate, may be by using emerging technologies. This may offer insight into the innovative educational practices that support students to devote their time and energy to educational activities. Technological developments such as wiki's, blogs and digital games have recently become a significant focus of attention in the field of education (Garris, Ahlers & Driskell, 2002; Gros, 2007; Pivec, 2007; Hong, Cheng, Hwang, Lee & Chang, 2009). To this end, game-based learning is a promising vehicle for facilitating students' active participation and engaged learning (Chen, Liao, Cheng, Yeh & Chan, 2012; Gee, 2003; Squire, 2003). Games incorporate features designed to engage students, such as imaginary, challenges, competition, fantasy, curiosity, uncertainty, goal decisions, discussion and emotional connection (Lo, Ji, Syu, You, & Chen, 2008; Prensky, 2008).

Therefore, this study offers new insight into understanding why students from diverse cultural backgrounds interact the way they do, and how cross-cultural interactions are produced and reproduced in the classroom. Furthermore, it offers insight into the social practices that reinforce existing social systems. A considerable amount of attention has been paid to engagement by international studies conducted by researchers including: Angelo and Natvig (2009), who researched engagement and online learning; Aronson, Janke and Traynor (2012), who took health professional engagement into consideration; Baron and Corbin (2012), who considered the contradictory realities of student engagement in higher education; and Carini, Kuh and Klein (2006), who interrogated the link between student engagement and learning. Although there is much less research published in this are in the South African context (Warwrzynski, Heck & Remley, 2012), interest has been gaining some traction following national research into student success over the last few years (Titus & Ng'ambi, 2014; Van

Dijk, 2013; Ivala & Gachago, 2012; Warzynski, Heck & Remley, 2012; CHE, 2010; Strydom & Mentz, 2010; Strydom, Basson & Mentz, 2010). After reviewing the literature, a limited focus was placed on cross-cultural learning and engagement in South Africa, yet not directly linked to the use of emerging technologies. Although the definition of engagement proposed by Strydom, Mentz and Kuh (2010) has been adopted in this current study. However, in this study cross-cultural student engagement will reflect on students' interaction between peers from diverse backgrounds. For the purpose of this study, cross-cultural engagement will explore classroom interactions, guided by the resources, such as digital games offered in the classroom.

Game based learning is a valuable process to foster student engagement within the classroom (Cicchino, 2015). Games may be used as tools to teach new generation students in a medium that they are used to interacting with, during their childhood years (Prensky, 2008). Such findings are not readily generalizable to the South African population, given the inequalities presented, the exposure to childhood games within this research context would be varied. Should students be familiar with playing games when interacting with peers, then it makes sense that a digital game would offer the similar interactive value as the games played during childhood. The researcher contends that since much of cross-cultural engagement hinges on interaction with peers, a digital-game based innovation has the potential to facilitate cross-cultural engagement, through interaction and communication. To date, there is a paucity of evidence within the South African education system regarding the use of emerging technology tools, such as digital games, wikis and blogs, to foster cross-cultural engagement in sport studies. Esteemed researchers (Amory, Naicker, Vincent & Adams, 1999; Amory & Seagram, 2003; Amory, 2012) have researched game-based learning and learning theories, using Information and Communication Technologies (ICT) based instructional design, however, not in sport studies. For effective learning to succeed using games, knowledge should be uniquely constructed through social interaction, using play, as well as exploration (Amory, 2012). A digital game is a favourable tool for educators to facilitate learning and active participation in education, and offers opportunities for students to engage in a non-traditional environment, such as a digital game based learning environment (Chen, Liao, Cheng, Yeh & Chan, 2012).

Therefore, evidenced by the literature presented, from a social-constructivist perspective, game-based learning approaches allow for the construction of knowledge through social interaction. Interacting with emerging technologies offers a unique social learning opportunity,

which has the potential of cultivating cross-cultural student engagement. Parenthetically, it may be valuable to determine the extent to which games, when implemented along with other emerging technologies, could be used to enhance cross-cultural student engagement within sports studies. The purpose of this study is to explore the production and reproduction of cross-cultural interactions, critically, using a digital game in sport studies. The theoretical aim is to develop a social-constructivist game based learning model for cross-cultural interaction.

The introduction of digital games, as well as other emerging technology tools, in particular wikis and blogs (see Section 3.5), has the potential to create neutral, openly accessible spaces, which all students can occupy to share knowledge and engage with content and one another. Siemens and Tittenberger (2009) argue that when technology is neutral, it is to be used as a tool. Therefore, for the purpose this study, a digital game will be used as a tool to uncover the underlying mental traces that affect and inform cross-cultural interaction. The issue of engagement is complex, as it previously focused on dialogue between the students and the teacher (Anderson, 2003). However, attention is given to emerging technology tools, such as digital games, wikis and blogs, to compliment and enrich engagement between the student, the teacher, the tools and the content.

As research instruments, wikis and blogs are not usually associated with games. However, in this study, to explore social interactions of students in sport studies, a digital game will be used to observe cross-cultural interactions, while playing a game in the classroom. A wiki and a blog tool are used to explore social interactions on a virtual platform. Therefore, the relationship between the tools is critical in this study, because engagement with the game relies on social interactions on all platforms. Emerging technology tools, such as wikis and blogs, are used for community-focused writing and the technological affordances, renders it more appropriate for specific purposes (Veletsianos, 2010), like facilitating cross-cultural engagement. One of the characteristics of emerging technologies is that they may or may not be new technologies' (Veletsianos, 2010, p. 13), and while wikis and blogs may not be seen as emerging technologies, or new, any longer, it is important to consider that the characteristics of emerging technologies may not yet be fully researched (Veletsianos, 2010). Consequently, these tools still offer affordances that enhance teaching, learning and student engagement. Therefore, this study will explore innovative ways of working with these tools, by supplementing wikis and blogs with digital games. This study will explore the production and reproduction of cross-cultural interactions, using emerging technologies in sports studies, in order to develop a social-

constructivist model for game based learning in South Africa. Social-constructivist approaches to teaching and learning focuses on how students generate knowledge, in order to understand and solve problems on their own, by applying their previous experiences and knowledge through a process of reasoning and critical thinking (Ilyas, Rawat, Bhatti & Malik, 2013).

This study will not engage in a debate regarding a definition of knowledge, as it does not add practical and epistemological value to this thesis. However, in this study a simple working definition will be adopted. In South African higher education, there is a tendency to limit definitions of knowledge to disciplinary areas, representative of research and specialization within faculties (Winberg, 2006). Therefore, knowledge is generated within particular disciplinary domains. Relating to knowledge, Ng'ambi (2004) purports that knowledge sharing is a process of construction and de-construction of information through interaction of human agents. Habermas (1972) argues that interaction and communication makes understanding (knowledge) possible in human agents. Therefore, knowledge in this study refers to the attainment and construction of information through a process of interaction and communication within social systems.

In this case, social-constructivism will be used as a philosophy to explain how learning and knowledge is generated through social interactions in a cross-cultural setting. Furthermore, social-constructivism and structuration considers the prior knowledge (and mental traces) embedded in education history. Social constructivism in this study offers insight into personal and patterned interactions of students, who enter the classroom, based on prior knowledge and experience. McMullen, van der Mars and Jahn (2013) acknowledge that many educators follow a social-constructivist framework, as there has been a shift from teacher-centered to a learner-centered approach to delivering education. For the purposes of this study, a social-constructivist learning environment could be used to examine how students socially construct knowledge in an engaged manner, while using various technologies as enabling tools

Theoretically, this study critically analyses the use of a digital game, through the lens of Anthony Giddens' Structuration Theory (See Section 2.3), to provide insight into cross-cultural student engagement. Students' social actions in the classroom, as a social system, are produced and reproduced based on prior experiences that recursively implicate the tendency of cultural clustering, which is considered a dominant norm. This is problematic, as it limits social construction of knowledge because students are still seen to be associating themselves in

cultural clusters as a social practice. Therefore, by disrupting this social practice, using modern teaching and learning approaches, Structuration theory provides a means to interpret this social phenomenon, in order to understand why it is perpetuated and how it may be reshaped.

Methodologically, using a sequential exploratory mixed methods approach, this study explores cross-cultural interaction of sport studies students through a process of randomization of groups.

1.4. Statement of the problem

South African universities attract and recruit students from diverse cultural and historical backgrounds. These very same students may have been exposed to games at a primary school level, as suggested by Pivec (2007). In the case of sport studies students, they may have been exposed to sports and games because many of them are sports people. As these diverse groups of students enter the classroom, anecdotal evidence shows that they tend to gravitate towards peers from their own cultural background. This may be due to expressions of norms and shared values within homogeneous groups, or because of mental structures that emphasize historical legacies of segregation. This phenomenon is also alluded to in the work of Ravjee *et al*. (2010), Kekwalestwe (2007) and Ng'ambi, (2004), however, their interpretation of this phenomenon was different. For instance, Ng'ambi (2004) postulated that knowledge is shared informally between students and is often limited to clusters of friends.

The limitation of this interpretation is that there is very little sharing and generation of knowledge happening beyond these clusters. Similarly, in this current study, while the classroom creates a culturally rich environment for knowledge construction through collaboration and engagement with peers, the diversification in the classroom hinders engagement, as well as knowledge sharing and cross-cultural engagement in the classroom. Knowledge, therefore, is only shared within the cultural clusters instead of across the cultural clusters. It is of pedagogical importance to create a learning space where this rich cultural environment can be exploited to facilitate cross-cultural student engagement and support learning by using a digital game, wikis and blogs. This current study, therefore, focuses on digital games to understand why cultural clustering occurs and how cross-cultural interactions are produced and reproduced in the classroom.

1.5. Research Questions

How are social practices of cross-cultural interaction produced and reproduced in the classroom, when using a digital game?

1. How does a student's prior educational experience inform cross-cultural interaction using digital games?
2. In what way does the use of emerging technologies facilitate cross-cultural engagement in the sport studies classroom?
3. How do cultural clusters engage with each other across cultural settings, while using digital games?
4. What mental traces enable, or constrain, cross-cultural interactions in sport studies?
5. How does the implementation of emerging technologies affect interactions in face-to-face cross-cultural engagements in the classroom?

1.6. Aim of the study

The aim of this study is to explore the production and reproduction of cross-cultural interactions, critically, using a digital game in sport studies.

1.7. Specific objectives of the study

The objectives of this study are to:

- Establish how cross-cultural interactions are produced and reproduced in a sport studies classroom;
- Describe students' knowledgeability of their social interaction in the sport studies classroom;
- Establish how digital games influence repetitive actions and interactions of cross-cultural engagement over a period;
- Describe the role of emerging technologies, to enhance cross-cultural student engagement through game based learning;

- Determine how the processes of cross-cultural interaction recursively impacts on the reproduction of dominant norms in the sport studies classroom;
- Identify interactions required to experience cultural engagement in an authentic manner; and
- Develop an emerging technologies model for reflective game based learning.

1.8. Significance of this study

Despite progress in innovative teaching and learning strategies, there is still a need to enhance teaching and learning practices at higher education institutions across South Africa. More importantly, there is a need to enhance cross-cultural student engagement, as it has been inextricably linked with academic success. Strydom, Mentz and Kuh (2010) offer a popular definition in the South African context. They assert that student engagement comprises two key components, which examine the amount of time students spend on educational activities, as well as the practices implemented by institutions to support these educational activities; however, this does not take into consideration how students interact and engage across cultures.

This study, therefore, explores how cross-cultural interactions recursively influence the production and reproduction of dominant norms in sport studies. Anecdotal evidence suggests that students in a sport studies class have the propensity to associate and interact with students from the same culture. This hinders engagement, as knowledge generated in cultural clusters is not shared across cultures. It is, therefore, important to disrupt the current social practices that hinder engagement, in order to reshape the dominant norms, present in a sport studies classroom. To do this, it is important to understand how the mental structures, such as cultural clustering, affect the interactions of students in the classroom. Similarly, it is important to understand how, through material resources, such as emerging technologies, interactions are able to reshape mental structures.

According to Veletsianos (2010), emerging technology is technology-enhanced learning that consists of tools, concepts, innovations and advancements, utilized in diverse educational settings to serve varied education-related purposes. For the purpose of this study, emerging technologies will be used as tools to uncover cross-cultural engagement in the classroom, as the affordances of emerging technologies is perceived to have merit in the area of engagement. Knowing whether emerging technologies can assist with the enhancing of cross-cultural

student engagement, will inform our pedagogical approach to teaching sport studies in South Africa.

This study will utilize the creation of a wiki to create an authentic learning task that will allow for collaborative construction of knowledge in an authentic context. This will be based on a curriculum for a particular sport science module, which ensures that there is a neutral environment conducive for cross-cultural interaction. It was therefore crucial to conduct this study to develop a social-constructivist model for game-based learning, using digital games in sport studies, in order to determine the how cross-cultural interaction is produced and reproduced. The use of digital game based learning in sport studies is a novel approach to curriculum delivery, due to the practical and theoretical nature of the students' current educational programme, where many students are familiar with the concept of a 'game', as it is part of their current programme. In addition, students are familiar with mobile technologies and actively engage with technologies across various social media platforms (McMullen *et al.,* 2013).

In this study, the researcher is presenting a social-constructivist game-based model that will highlight social interactions in the classroom, which may facilitate cross-cultural engagement. This proposes additional teaching alternatives, and inform our teaching and learning practices for institutions, who offer sport science, or other health science related programmes, underpinned by social constructivism. This study offers two contributions; i) a practical contribution that considers pedagogical implications for cross-cultural engagement, which could be used to improve teaching in sport studies, and ii) a theoretical contribution in the form of a social constructivist game-based learning model that offers an understanding of the social phenomenon of cross cultural interaction, which future researchers will utilize.

1.9. Summary of research methods adopted

A more detailed discussion on the methodological considerations is presented in Chapter 4. What follows is a brief description of the methodological considerations and an overview of the relationship between the purposes of this study, the research design. In order to understand the phenomenon of cross-cultural engagement, a digital game was developed, as a tool to facilitate social action. The researcher embarked on a pilot study to develop and test the digital game, before its implementation, in Phase 1. The game was piloted by previous cohort, who

had already completed the course in the previous academic year. The overall research design followed a sequential exploratory mixed methods approach (Creswell, 2009), which comprised data collected from 106 participants, across two phases, over a two-year period. In 2013, Phase 1 consisted of a digital gaming intervention only. In 2014, Phase 2 consisted of a digital game, a wiki and a blog. The exploratory nature of this study appeared to be well suited for a mixed method approach, as mixed methods allow for the exploration of a research topic that is under scrutiny (Tashakkorri & Teddlie, 2003; Creswell, 2009).

The findings of this study have been interpreted within the social-constructivist framework (Wilson, 2011). To this end, the students enter the classroom with their own assumptions and prior knowledge, which developed through learning provision. Thus, the overarching framework used for this study was Anthony Giddens Structuration Theory. This theory was selected because it provides a way of understanding how cross-cultural interaction is produced and reproduced over time in sport studies. Authentic learning (Herrington *et al.*, 2010) was also used as a framework to develop an emerging technology task, as it offers a developmental teaching strategy that reflects the kinds of activities that students may engage in, in the real world.

Second year sport studies students were invited to participate in this study. Sixty-Four (64) students from the 2013 cohort participated in Phase 1 of the study, and forty-two (42) students from the 2014 cohort took part in Phase 2. The quantitative data was analysed, using descriptive and inferential statistics in SPSS v.20, while the qualitative data was captured and coded in Atlas TI, and analysed, using thematic analysis. Findings emanating from the data was interpreted and discussed through the lens of Structuration Theory. A detailed description of the research methods used in this study is presented in Chapter 4.

1.10. Interpretation of key terms

Emerging Technologies is often used without clear meaning or definition (Veletsianos, 2010). Veletsianos proposes that emerging technologies are tools (such as wikis and blogs), concepts, innovations and advancements utilized in diverse educational settings to serve varied educational purposes. However, the use of emerging technologies is something that may be possibly disruptive. This is important, as emerging technologies are required to disrupt the social practices observed in a sport studies classroom, in order to create new norms

underpinned by cross-cultural interaction. Emerging technologies are also 'old' and new', and have been heralded as providing the opportunities and affordances to transform education, learning and teaching (Veletsianos, 2010).

Game based learning is regarded as a promising vehicle for facilitating students' active participation and engagement, which embodies powerful principles of learning (Chen, Liao, Cheng, Yeh & Chan, 2012; Bransford, Brown & Cocking, 1999; Gee, 2003; Squire, 2003 as cited in Squire, Giovanetto, Devane and Durga, 2005). Amory, Naiker, Vincent and Adams (1999) indicate that games as a learning tools could provide sufficient stimulation to engage learners in knowledge discovery, while at the same time developing new skills.

Wikis are emerging technology tools for collaborative editing tools, supporting the creation of cohesive artefacts, authored by many individuals (Ioannou, Brown & Artino, 2015). They are particularly appealing tools providing instant, any time, any place, access to a dynamic and ever building digital repository of user specific knowledge, and a voice in a live community of practice (Wheeler, Yeomans & Wheeler, 2008)

Blogs are emerging technology tools, which are Websites that form part of an information sharing technology, containing dated entries about a particular topic (Boulos, Maramba & Wheeler, 2006)

Student engagement is a predictor of student satisfaction and student success (Strydom Mentz & Kuh, 2010; Kuh, 2007). It can be defined by two key components, first, "what students do (the time and energy they devote to educationally purposive activities) and second, what institutions do (the extent to which they employ effective educational practices to induce students to do the right things)" (CHE, 2010, p. 3).

Cross-cultural student engagement: although the broad definitions of engagement will be adopted from Strydom, Mentz & Kuh (2010),in this context, cross-cultural student engagement will also observe what students and institutions do in a cross-cultural context, when using digital games. This is also interpreted as cross-cultural interaction.

Sport Studies/Sport studies is a collective term to refer to a broad range of disciplines that have the study of sport, exercise, leisure and recreation at their core, including biophysical and socio-cultural approaches (Magdalinski, 2013).

1.11. Overview of chapters

In Chapter One, the study was introduced and the motivation to conduct the research, highlighted. The contextual background about education in South Africa was presented, including a brief insight into past research that was conducted on the poor success rates and the implications thereof. The research aim and objectives were outlined, as well as the significance of the study. Student engagement and its significance for student success, was also discussed. While the above indicated that the strategy to improve engagement has not been as successful in South Africa, in this chapter, the researcher proposed that games and other emerging technology tools might be a valuable strategy for the improvement of cross-cultural student engagement. The South African education landscape was clearly highlighted, which led into the research questions that guided this entire study. It is from these research questions that the specific aims and objectives emerged. In conclusion, an interpretation of the key themes and an explanation of the methodological considerations were also provided.

In Chapter Two, the theoretical framework, which underpins the collection, analysis and interpretation of the data and findings is provided. Consequently, the focus in this chapter is on Social-Constructivism, Structuration Theory and Authentic Learning.

Chapter Three contains a literature review, focusing on the current state of higher education in South Africa, emerging technologies in higher education and gamification in the classroom.

In Chapter Four, the methodological considerations used in this study are described. The research approach, an explanation of the methods of data collection, the selection of participants and a description of the research setting are outlined. The data collection setting, which includes, adopted procedures, trustworthiness and reflexivity, a description data and finally, ethical considerations are discussed.

In Chapter Five, the results of this study are offered from the different data sets. The qualitative data from Phase 1 and Phase 2 of this study are explored and a comprehensive, yet succinct analysis of the qualitative results, from data collected over a two-year period, is provided.

In Chapter Six, the quantitative data from Phase 1 and Phase 2 of this study are explored and analysed using AtlasTi, to yield the quantitative results.

In Chapter Seven, an in-depth discussion of the results through the theoretical lens of Structuration Theory and Authentic learning is offered.

Chapter Eight comprises the conclusions and recommendations for this study.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1. Introduction

In this chapter, a new theoretical approach to teaching sport studies in a digital age is presented. The researcher offers insight into the use of game based learning and emerging technologies through a social-constructivist lens that supports the interpretivist epistemological stance of this study. The overarching theory used is Giddens Structuration Theory, which posits that social reality is produced, either by the individuals (students) themselves, or by social forces (Giddens, 1984). In addition, the nine (9) principles of authentic learning (Herrington, Reeves & Oliver, 2010) are used as guiding principles to design learning tasks, in a structured way, to foster interactions that may facilitate cross-cultural student engagement. The link between the theories is underscored by social constructivism, where students in sport studies enter the classroom with prior knowledge. The Giddens' structuration theory will be used to interpret how cross-cultural interactions are produced and reproduced, when using digital emerging technologies.

2.2. A Conceptual Framework

The student population in the sport studies classroom is culturally diverse. They emanate from differing socio-economic, as well as schooling backgrounds, where multiple languages are spoken and understood. Despite the diverse backgrounds, in a cosmopolitan sport studies classroom, there is a tendency to gravitate toward groups with cultural similarities. This social phenomenon, therefore, creates conditions, which may hinder cross-cultural interaction and cross-cultural sharing of knowledge. While students enter the classroom with prior familiar knowledge and experiences, the legacy of an oppressive apartheid regimes' policy of segregation, may ignite a natural tendency to gravitate towards groups with cultural similarities. In this study, these groups will be referred to as *cultural clusters*, as mentioned in Chapter 1. Therefore, this unintentional gravitation into *cultural clusters* leads to poor collaboration across cultures in the classroom. Social Constructivism is the underlying philosophy of this study, which is discussed at length, along with Structuration Theory and Authentic Learning. Figure 2.1 below offers a diagrammatic representation of the conceptual

framework, which graphically illustrates how the constructs, used in this study, are related. The rest of this chapter is dedicated to unpacking the constructs illustrated in Figure 2.1.

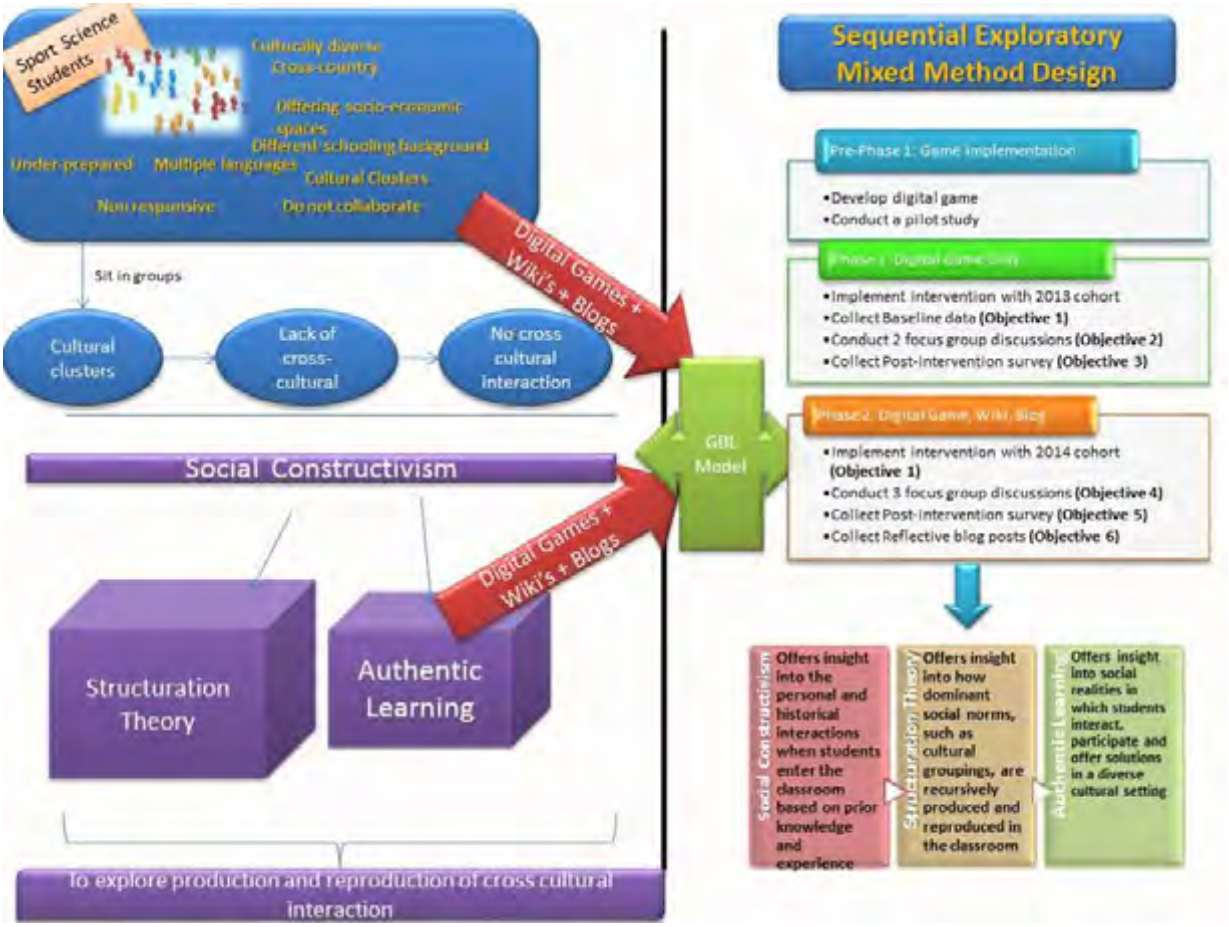


Figure 2.1: A conceptual framework for this study

2.3. Social Constructivism

Vygotsky and Piaget contributed remarkably to constructivist and social-constructivist schools of thought (Ilyas, Rawat, Bhatti & Malik, 2013). They assert that the main aim of a constructivist approach is to understand particular issues through the application of prior knowledge and experience, using reasoning and critical thinking skills. The assimilation and accommodation, as highlighted in the work of Piaget (1932), signifies that for this study students, who may not have experienced segregated apartheid practices directly, may have assimilated experience akin to the apartheid regime trauma in order to preserve their autonomy as a whole. Assimilation is an activity, or process of adapting, incorporating, or adjusting new ideas into an existing structure (Simatwa, 2010), such as a group. Therefore, the historical effect

of segregation is observed in the classroom. In addition, students have accommodated and adjusted to the norms of cultural clustering and recursively reproduced this practice. Fosnot and Perry (2005) assert that in new situations, the outcome of accommodating is linked to the individual's attempts to reconstitute previous behaviours in order to preserve its functioning within his/her environment. Vygotsky believed that things are meaningless unless perceived socially (Vygotsky, 1978). Therefore, the way students assimilate and accommodate cultural clustering in the classroom is manifested in segregation in the classroom which hinders cross-cultural interaction. At the level of interaction, there appears to be very little cross-cultural engagement among the students and therefore, the meaningfulness of learning is underplayed at a social level. It is important to examine how interactions between students from diverse cultural settings reproduce dominant social norms, as there appears to be traces of historical segregation embedded in the minds of students. From a social constructivist perspective, the social interactions in the classroom, frame students' view of knowledge based on prior experiences, as well as how they make sense of current conventions in the classroom. Vygotsky (1978) avers that learning takes place through interaction with other people, in a social and cultural context, and cannot take place in isolation. More specifically, a better learning effect may be observed when the experience is undertaken with one or more experienced peers or educators. He also posits that unless learning artefacts are perceived within a social context, through a form of communication, the learning is less meaningful. Therefore, an opportunity exists to uncover the unique experiences student bring into the classroom with regard to cross-cultural interaction.

Ilyas, Rawat, Bhatti and Malik (2013) aver that a social constructivist approach provides better opportunities for collaborative interaction and learning. Constructivism presupposes that before entering the classroom, students have gathered a multitude of unique experiences (structures) and bring with them personal beliefs and knowledge about how the world works (rules) (Colburn, 2000). This notion supports the convictions in this study that the way students situate themselves in the classroom, and which cultural cluster they choose to interact with, may be based on personal beliefs and knowledge about how social systems function in higher education institutions. These sub-conscious beliefs could be disrupted using emerging technologies. In addition, constructivism shifts the view of knowledge from a historical, eternal truth, which would seem to focus curricula on current knowledge, to historical cultural interventions that are changing and evolving, making meaning of current knowledge more dependent on where we have been (Colliver, 2002). In light of this, the remnants of the South

African apartheid legacy in the classroom exemplify how current knowledge is constructed through interactions in social systems of a diverse cultural nature. Cooperative learning, therefore, is hinged on a constructivist viewpoint, and can be observed when students exchange ideas verbally (Colburn, 2000). In this study, cooperation is required while playing the curriculum-based game, as they will interact and engage with their peers from different social groupings. This may pose as a disruption to the dominant norms, which have been produced and are constantly reproduced, because of recursive behaviour that influences students to gravitate toward peers of the same cultural background. This suggests that the implementation of a game could be used in a social-constructivist paradigm to construct new ideas about interacting in social systems, toward the construction of knowledge, and to foster cross-cultural engagement in the classroom.

Simply put, social-constructivism is an active learning process whereby learners construct new ideas, knowledge and concepts based on previous knowledge. In constructivism, learners use inquiry and discovery based learning approaches to construct personal interpretations of knowledge based on their previous experience and application of knowledge in relevant contexts (Hazari, North & Moreland, 2009). Therefore, the principles of social constructivism are embedded in the digital game, the authentic wiki task and the blog, in order to set learners on a path of discovery where personal interpretation of knowledge through interaction with others in a diverse classroom setting is enhanced. This is important, as the traces of segregation in the minds of students affect their potential to engage with peers at a cross-cultural level. However, because students enter the classroom with prior personal knowledge and understanding of how the world works, constructivist principles were employed to guide the design of the game in order to negate historical traces of segregation in the classroom. For this study, students will constantly be engaged in a process of playing the game and constructing a wiki. In addition, the content knowledge gained after completing the wiki task could also be applied in a gaming context, thereby ensuring that students build on their knowledge while playing the game. This enables students to interact on a cross-cultural level, where there is potential for the collaborative construction of knowledge, which takes place in a neutral online (wiki) setting. Neutrality in this instance makes reference to Siemens and Tittenberger (2009) notion that technology is neutral, it is to be used as a tool. Thus the wiki as a tool is considered a neural online setting. The constructivist approach incorporates many pedagogical goals in the knowledge construction process. This is achieved by providing appreciation for multiple perspectives, social interaction, embedding learning in relevant contexts, encouraging

ownership in the learning process, embedding learning in social experience, encouraging use of multiple modes of representation, and encouraging self-awareness of the knowledge construction process (Hazari, North & Moreland, 2009). Valuable insight into learning-theory foundations in game-based learning is gained through this process (Wu, Hsiao, Wu, Lin & Huang, 2012). In addition to these pedagogical goals, all of which will have a significant impact on this study, Wilson (2011) summarized the strengths of constructivism as follows:

a) correspondence to how people really learn (through active engagement and meaningful activity);

b) there is a strong focus on problem solving, critical thinking and higher order cognitive outcomes;

c) constructivist learning environments seeks to integrate emotion, affect and engagement into discussions of learning and cognition; and

d) there is more relevance to job and out of classroom performance (there is an emphasis on authentic performance in realistic settings).

The strengths of constructivism are used in this study to offer insight into how students learn through interaction while engaged with emerging technologies. It will also consider the relevance of real-world performance using authentic learning practices. Additionally, Neumann and Hood (2009) suggest that wikis (wiki engines), in line with social-constructivist thinking, promote collaboration among peers, encouraging them to work together in constructing knowledge and sharing ideas. This bodes well for this study, as students are able to construct knowledge by doing a wiki task, as well as playing a digital game. In addition, knowledge is constructed through the continuous engagement with the content learnt since doing the assignment (wiki) and subsequently engaging with the digital game. Besides, by augmenting games with wiki's and blogs, constructivist approaches also focus on the importance of the socio-cultural context in understanding what occurs in the world through social interaction and constructing knowledge (Wu, Hsiao, Wu, Lin & Huang, 2012). This allows for a social process of learning, in other words 'game play' and takes into account the students' perceptions of the learning environment, as well as the way they interact with one another within these learning spaces. Consistent with Wilson's claims of the strengths of social-constructivism, when students encounter more complex problems or tasks during instruction, they should be able to transfer that knowledge to the work setting, where an authentic performance in realistic settings is emphasized (Wilson, 2011). There is, therefore, more

relevance to job and out of classroom performance, or an emphasis on authentic performance in realistic settings. This strengths-based approach is utilized in this study using an authentically designed wiki-task, which was implemented in Phase 2.

In an education setting, a social constructivist model is centred on the theories of constructivism, allowing learners to construct knowledge by means of dialogue with other members in the education space, or community (Kemp, 2000). Learning, therefore, is created by a team and not merely because of the adopted teaching method. For the purposes of this study, social constructivism, as a philosophy in education, is used to explain how students construct new knowledge and ideas using a game in sport studies. From the constructivist point of view, learners are active participants in knowledge acquisition, and are engaged in restructuring, manipulating, reinventing and experimenting with knowledge to make it meaningful, organised and permanent. It is envisaged that this study will contribute to an understanding of students' personal and historical interactions, based on prior knowledge and experience, when they enter the classroom. Understanding this phenomenon would be invaluable in the development of a method of practice, a pedagogical model for game based learning in a social-constructivist paradigm.

Social Constructivism, however, is not able to explicate how the dominant norms that exist based on prior experience are produced and reproduced because of the interventions followed in this study. Structuration Theory, therefore, offers insight into how dominant social norms, such as cultural groupings, are recursively produced and reproduced in the classroom. It also offers insight into how these social norms are challenged and how new structures are produced and reproduced. The section that follows highlights literature regarding Structuration Theory that will provide the overarching theoretical framework for this study.

2.4. Structuration Theory

Structuration Theory focuses on the study of human agency and social institutions (Giddens, 1984). The basic tenets of Structuration Theory are structure and agency. For the purposes of this study, the social institution is a sport studies classroom. The process of structuration is underpinned by informed actions of the human *agency* that arranges and repeats actions, forming the set of rules, practices and routines, which, over time and space, constitutes the notion of *structure*. According to Giddens (1984), the process of structuration is:

> *The basic domain of study of the social sciences, according to the theory of structuration, is neither the experience of the individual actor, nor the existence of any form of societal totality, but social practices ordered across space and time. Human social activities like some self-reproducing items in nature are recursive. That is to say, they are not brought into being by social actors but continually recreated by them via the very means whereby they express themselves as actors. In and through their activities agents reproduce the conditions that make these activities possible. (Giddens, 1984, p. 2)*

The key terms and interpretations offered by Jones and Karsten (2003, p. 10) in Structuration Theory are;

- **Structure(s):** Rules and resources organised as properties of social systems. Structure only exists as 'structural properties'.
- **System(s):** Reproduced relations between actors, or collectivities, organised as regular social practices.
- **Structuration:** Conditions governing the continuity/transformation of structures and the reproduction of social systems.

In this study, the researcher's contention is that the actions and interactions of students in the classroom are repetitive, and influences them to gather in cliques that are representative of their own culture. Anecdotal evidence suggests that there is a tendency with students in the sport studies classroom to sit in the same place and interact with the same people each week. This could be indicative of the historical traces of the apartheid system of segregation, which may have been embedded in the minds of students. Additionally, anecdotal evidence suggests that these actions are created by the students (actors/agents), who, through their actions, reproduce conditions that make these activities possible. Therefore, the researcher aims to use Structuration Theory, to gain insight into the production and reproduction of cross-cultural interactions of students, using emerging technologies in sport studies.

Structuration Theory also focusses on the association between individuals and society (Jones & Karsten, 2008). Fuchs (2003) explains that human social activities are recursive because they are continually recreated by human actors/agents. In addition, Giddens posits that social reality is produced either by the individuals themselves, or by social forces (Alanezi, 2007). Various

authors concur with Giddens that structure and agency are dichotomous and mutually reliant (Jones & Karsen, 2008; Alenezi, 2007; Fuchs, 2003). Therefore, the social phenomena that are observed in society are a product of both structure and agency, where human agents invoke social structures in their actions, while, simultaneously, producing and reproducing the same social structure (Jones & Karsten, 2008). However, Archer noted that structuration theory was problematic as it raised many problems as it intended to combine functionalist viewpoints with other interactive traditions in a single theoretical framework which sought to explain social reproduction deviating from the subject/actor (King, 2010). Archer was also of the opinion that Giddens over-socialises agents who have thoroughly interiorized their social conditions (King, 2010). Giddens (1984, 2007) further argues that society evolves from human agency that is based on knowledge, intended goals and planning. Individuals act within social structures, which have a distinct set of social norms and rules. Archer also criticized the notion of rules and suggest that the assertions Giddens makes about freedom is unresolved because he fails to maintain a distinction between the individual and social reality (Archer, 1988). These social norms and rules are produced and reproduced through interactions that are mitigated by individuals in society (Giddens, 1984). Therefore, the process of structuration may be seen as an interplay of meanings, norms and power (Alanezi, 2007).

As a research framework, Structuration Theory has been used to emphasise the composition and re-composition of social practices, as revealed by Pozzebon and Pinsonneault (2005). Giddens' way of positing the mediating capacities of social structures as an outcome of human action and agency is a valuable point of departure in social contexts (Englund & Gerdin, 2008). Giddens attempts to integrate human agency, social structure, social systems and social institutions (Chang, 2014; Jones & Karsten, 2008; Alanezi, 2007; Tucker, 1998; Giddens, 1984). There are however other theories theorist that also integrates social structure, social systems and social institutions. Like Giddens, Bourdieu argues that any satisfactory social theory must challenge the opposition of structure and individual action as the one cannot be understood without the other (Tucker, 1998, Giddens, 1984). This understanding is captured in Giddens notion of duality. However, Archer (1982, 1988, 1995) refutes this notion and avers that ssocial structures exist in separation from agents. Thus dualism, suggests that the groupings within society and the agents that exist as a part of society subsist in relative division (Le Boutillier, 2014). Much like Giddens, Bourdieu contends that his notions of habitus as an example can capture the complexity of social action and move social theory in a progressive direction (Tucker, 1998). Similarly, Giddens and Bourdieu are concerned with the ways in

which power permeates through all areas of society. For Giddens, rules are inseparable from the exercise of social power (Tucker, 1998). The complex nature of social interaction can therefore be viewed from various perspectives. As such, social action can also therefore be explained through the lens of complexity theory. Although it is not within the ambit of this study, it is important to note that complexity theory challenges educational philosophy to reconsider accepted paradigms of teaching, learning and educational research (Morrison, 2008). Complexity theory is a theory of change, evolution, adaptation and development for survival which raise an interesting agenda for the philosophy of education. Complexity theory offers explanation into the emergence and co-evolution of the agent through a process of learning. It considers the agent, their social group as well a broader society (Morrison, 2008). Complexity theory therefore links social interaction by placing emphasis on the relationship between these elements while being cognizant that the mind of an agent is a complex adaptive system (Morrison, 2008). For the purpose of this study, human agency and social structure take into consideration the way students interact (structure) in a multicultural classroom, based on rules and resources in the classroom. Social structure and social institutions refer to students' social actions and activities, which are based on prior knowledge and experiences in an existing social system. In this study, the continuous repetition of human practices and interaction are manifested in cross-cultural engagement. Therefore, regarding material resources, like digital games, wiki's and blogs, the real affordances of the technology and its outcomes arise from the actions of human agents (Pozzebon & Pinsonneault, 2005). In this study, Structuration Theory will be used to elucidate the habitual nature of human interaction, as well as to demonstrate how the implementation of an innovative digital quiz game, wikis and blogs, mediate and transform the structures embedded in the minds of students, in order to facilitate interaction and engagement across cultural groups.

Therefore, through habitual actions, routines and practices, people create rules for their actions. These rules are then constructed and reproduced to configure and structure subsequent practices (Alanezi, 2007). Much of the actions produced by agents in their society are based on historical experiences. It is important to note, that said rules and resources are not controlled by the agents, but rather used by those who are knowledgeable and conscious of their actions. In this study, the rules that inform the actions of students may be linked to traces of a segregated history. Therefore, the outcome of their actions is not completely anticipated or predictable (Alanezi, 2007). Consequently, it is understood that social agents would adopt rules, which they have learnt through a process of socialization (Alanezi, 2007), and that are appropriate for

their society. As mentioned previously, this study contends that because of historical legacies of segregation, students organise themselves in groups that are representative of their own cultural group, and do not overtly interact or engage with those outside their own cultural groups. The outcome of their actions, therefore, lends itself to cultural clustering, which leads to lack of engagement and interactions with other cultural groups, because familiar rules about social practices in the classroom had been adopted. These practices are learnt through social reproduction of systems that inform their perception of their roles in the classroom. It is believed that actors have a transformative capacity, as Giddens claims that they have power over their actions (Alanezi, 2007). Consequently, they undertake intended actions, which may have unintended outcomes. The unintended outcome of cultural clustering, therefore, leads to lack of engagement and cross-cultural sharing of knowledge.

Giddens differentiates between system and structure by highlighting how interactions of human agents are guided by rules (or set of rules) and resources that make up social structures (Giddens, 1984). At the heart of this, however, is the reciprocal nature of these interactions between social structures and the interactions of human agents, in which people consciously or unconsciously produce rules and form power relationships (Callahan, 2004). The rules and relationships serve as structures that frame social systems until continued interactions among actors redefine the structures (Callahan, 2004).

According to Giddens (1984), people follow rules patterned in social structure and a collective knowledge of social rules is the condition of social interaction. However, social interaction is more than rule-following conduct, because the outcome is shaped by differences in the power and resources that people have at their disposal (Tucker, 1998).

Table 2.1: Implications of Structuration theory on this study. (Adapted from Giddens, 1984, pp. 281-284 and Jones & Karsten, 2008, p. 9)

Key Feature		Implications for research in emerging technologies
1	All human beings are knowledgeable agents.	This researcher assumes that whilst they may not be able to, or articulate themselves, all students (social actors) are knowledgeable beings and are actively engaged in acting out of social practices of cultural clustering.
2	The knowledgeability of human agents is always bounded on the one hand by unconscious and on the other unacknowledged conditions and unintended consequences of action.	Social actors' understanding of their segregated practices is necessarily limited as it is embedded in the unconscious minds of students. Therefore, supporting evidence was gathered to gain insight into their explanation of their actions.
3	The study of day-to-day life is integral to the analysis of the reproduction of institutionalized practices.	If researchers want to understand large-scale, institutional, social phenomena that persist over time, they need to study everyday practices of the relevant social actors that constitute them. Thus analyzing the structures that recursively implicate the tendency of cultural clustering
4	Routine, psychologically lined to the minimizing of unconscious sources of anxiety, is the predominant form of day-to-day social activity	Most everyday social practices that researchers study are routinized (tending to reproduce social structures), and hence stable over time, because this is psychologically reassuring for social actors. Students in this study tend to associate themselves in homogenous cultural groups as a day-t-day social activity.
5	The study of context, or the contextualization of interaction, is inherent in the investigation of social reproduction	To understand how social practices are sustained over time, researchers need to study the particular setting, in which they take place. The study context has traces of historical legacies, which may be informing social action.
6	Social identities, and the position-practice relations associated with then, are "markers" in the virtual time-space structure.	Although structure is virtual, its effects can be observed indirectly through its influence on the social roles that people play. In a cosmopolitan classroom, the effects of historical segregation are observed indirectly through students' seating patterns.
7	No unitary meaning can be given to constrain in social analysis	A variety of constraint (material, sanctions, and structural) may enable and restrict social actors in particular setting. Diverse cultural groups may be a constraining factor that restricts interaction of social actors.
8	Among the properties of social systems, structural properties are particularly important, since they specify overall types of society	Different types of society are characterized by different social properties (that shame the norms, meaning and power relations of social practice). Each culture differences offer different social systems and structural properties.
9	The study of power cannot be regarded as a second-order consideration in the social sciences	Accounts of social practices need to give particular attention to the operation of power relationships. All groups have power relations and it is important to determine how these impact on social practices in the classroom.
10	There are no mechanisms of social organisation or social reproduction identified by social analysts which lay actors cannot also get to know about	People can always learn about social researchers' accounts of how society works and may be drawn in on these actions. What students do and why they do it informs the production and reproduction cultural clustering.

	and actively incorporate into what they do.	

Actors/agents in a system use resources to exert power over other people and objects (Callahan, 2004). Alanezi (2007) reiterates that the social activities of humans are recursive. This implies that they may be repetitive and allowed to be continually recreated via the means that humans use to express themselves, as actors/agents. Chang (2014) indicates that Giddens' proposed the notion of structure as a set of sanctioned rules and resources that mediate social interaction through three modalities: interpretive schemes, facilities and norms. Often, the production and reproduction of structures through action are both unacknowledged and unintended outcomes of intentional action (Jones & Karsten, 2008). If actions are repeated over long enough periods, cross-cultural interactions (unintended outcome) of individual and group actions could be considered mental traces, which may appear to have structural properties, as observed in the classroom. Depending on the response of the actions (based on mental traces) that are observed in social structures, people may believe that the actions have legitimacy and power. Structure, therefore, is an enabler for the further use of legitimized action (Chaisson & Saunders, 2005).

Structure refers to the interactions of human agents, as they are guided by sets of rules and resources, which make up social structure. Individuals consciously produce and reproduce rules and form power relationships (Callahan, 2004). Structure, in this study, will also be applied to how the interactions of the participants, as human agents, are guided by a set of rules and resources in the classroom. For this study, structure will refer to sport studies students' interaction(s), which are associated with the social actions that include the rules and resources they draw on to inform their actions.

Giddens (1984) identifies three dimensions of structure – signification, domination and legitimation. These dimensions are linked to three parallel dimensions of interaction, namely, communication, power and sanction, by means of three modalities, respectively expressed as interpretive schemes, facilities and norms. In Structuration Theory, structure consists of two types of rules and two types of resources. The two rules are based on legitimation and signification (Callahan, 2004). Legitimation provides information interaction and the process of these interactions in social spaces (Callahan, 2004). In contrast, signification provides information about how actors create symbolic interpretive schemes that facilitate communication during social interaction (Callahan, 2004). The two types of resources are

allocative resources and authoritative resources (Giddens, 1984). Callahan (2004) indicates that people in formal leadership positions would have access to authoritative resources, and, therefore, possess authoritative power, whereas allocative resources refer to the power over objects or items. Actors' interactions are based on 'rules' and 'resources', while simultaneously, new sets of 'rules' and 'resources' are produced (Chang, 2014). The agents' actions, interactions and the social environment they find themselves in are reciprocally active and dependent on one another (Chang, 2014).

Giddens reassigns structure and agency into a duality, dependent on each other, as opposed to two independent constructs, known as dualism (Rose & Hackney, 2003). Social structure and human interaction are divided into three dimensions of recursive nature and interconnected by modalities. Consequently, when human agents communicate or interact with one another they draw on interpretive schemes to make sense of and give meaning to social engagements. At the same time, the interpretive scheme allows for the production and reproduction of social structure. Similarly, the facility, which allows for the allocation of resources (allocative or authoritative) by exercising power, therefore, produces or reproduces structures of domination based on moral codes and norms. As a result, this interactively produces structures of legitimation, as it is determined by the moral codes that sanction human interaction (Rose & Hackley, 2003).

Fuchs (2003) recaps Giddens' notion that social structures exist within the actions of individuals based on rules and resources, as well as the production and reproduction of social action, which simultaneously serve as a means of system reproduction. Structuration theory, therefore, defines structure and agency as a duality (Gao & Li, 2010). The actions executed by agents constantly produce and reproduce social constructs, which both enable and constrain those (Gao & Li, 2010). The social constructs in this study refer to the manner in which students organize themselves into cultural clusters, which hinder cross-cultural interaction. These interactions are linked to mental structures based on the resources and rules adopted in social settings (Gao & Li, 2010). The process of duality of structure that is reproduced over a period, in a social system, is defined as structuration (Gao & Li, 2010).

2.4.1. Duality of Structure

Giddens (1984) makes a compelling case for duality. He asserts that agents use structures to complete their actions, and, in so doing, fortify or reproduce the very same structures

that shaped their actions initially. In this study, the structures referred to are the mental structures that students create regarding what they perceive a sport studies classroom to be, based on behaviours linked to cultural clustering. These behaviours could be based on historical legacies of segregation as well as the actions associated with adhering to the norms which was entrenched within the segregated system. In the current study, the use of technologies may alter their structure and influence their actions in the classroom. Students may draw on modalities, such as emerging technologies, to influence their interactions with peers.

Importantly, these structures were created by social practices that were informed by human action. This nexus is crucial to the theory of structuration. In his concept of duality of structure, Giddens links social structures with human actions (Giddens, 1984). Consequently, human actions and interactions create social structures, which in turn shape the actions and interactions of humans (Burridge, Carpenter, Cherednichenko & Kruger, 2010). Burridge, Carpenter, Cherednichenko and Kruger (2010) purport that recognising the duality of structure allows for the analysis of social interaction, without the generalisation that occurs when describing human agency as an isolated component within a social system. This implies that the social interactions of students in this study cannot be viewed in isolation, as is the case when describing agency, but would be viewed as a phenomenon in the social system (classroom setting).

'Duality of structure', which is at the core of structurationist understanding provides crucial insight into the interrelationship between social interaction of agency and the production and reproduction of social structure practices (Conrad, 2014). In this study, therefore, students draw on mental structures that inform their social action of agency. The actions expressed by students are interrelated through a process of production and reproduction of structures through interaction. These actions may reinforce existing systems linked to cross-cultural interaction, or alternatively, the adaptation of rules in the development of new structures of students' knowledge and resources, through structure and human interaction.

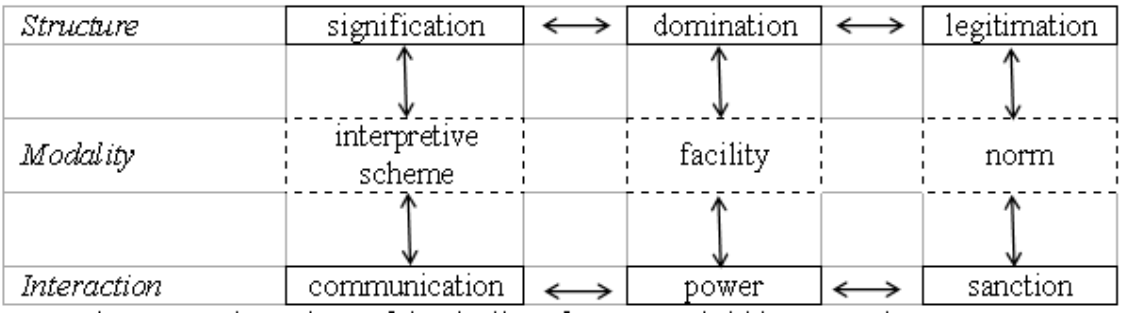


Figure 2.2: Dimensions of the duality of structure (Giddens, 1984)

Therefore, in this study, the production and reproduction of cross-cultural interaction will be explained, using the dimensions of structuration theory, as illustrated in Figure 2.2., in which, structures of signification appear as a collective understanding in a group. Structures of domination are the resources people elicit to exercise power. Structures of legitimation are the norms, rules and rights that guide behaviour (Huebner & Britt, 2006). The application of these dimensions in this study is presented in Section 2.4 of this chapter.

Fuchs (2003) iterates that signification, domination and legitimation are the three structural dimensions of social practices within the duality of structure. The first dimension is called 'signification'. This refers to the types of knowledge possessed by actors, which is applied reflexively in the supporting communication. Through communication, actors draw on interpretive schemes, which is the shared knowledge that agents employ to analyse behaviours and events, so that meaningful interaction may be achieved (Chang, 2014)

The second dimension is 'domination'. This dimension refers to the resources agents use to elicit power. It also depends on the mobilisation of authoritative and allocated resources (Chang, 2014). Allocative resources refer to the command over goods and material things. Authoritative resources refer to the command over persons or actors. These resources are drawn on by facilities that allow for the allocation of resources that reproduces social structures of domination (power).

The third dimension, legitimation, refers to the 'organisational rules' that justify conduct as being appropriate in a social setting. As a result, components deemed normative will be based on interactions that centre on social relations, which are underpinned by rights and obligations of those who participate across a range of interactive contexts (Chang, 2014).

Giddens (1984) avers that people's actions are a vibrant social process and that structuration highlights the duality of the individual and the society. Within an educational setting, duality of structure allows for the identification of students' actions, the reproduction of social norms, cultures, and rules by teachers, as well as how these same norms, cultures and rules affect the actions of educators and students (Burridge, Carpenter, Cherednichenko & Kruger, 2010). Therefore, students, who enter into classroom social situations, which are out of their control, have ideas about the norms, values and rules of the classroom setting. Consequently, their actions are informed by the dominant norms that reinforce the existing social system. This theory, therefore, allows the researcher in this study to explore the production and reproduction of cross-cultural interactions, critically, using emerging technologies in sport studies.

As can be seen from the above, Giddens intellectualises the production and reproduction of social practices as duality of structure in a way that highlights social structure as a facilitator, as well as an outcome of people's behaviour. Structures are not external to human action, but are integrally involved in everyday practices, which bind space and time together (Tucker, 1998). This is the basis of Giddens's argument about the duality of structure, in which rules and resources are drawn on, but also constituted in the social activities of people (Tucker, 1998). Therefore, structures are instants recursively occupied in reproducing said social systems (Fuchs, 2003).

2.4.2. Application of Structuration Theory

Structuration theory could be applied to the understanding of human agency and social institutions. In this study, the social institution is the sport study classroom of a higher education institution in the Western Cape Province of South Africa. Giddens, the originator of Structuration Theory, posits that structuration is a process whereby human actions are repeated over time and space, based on routines, practices and a set of rules. In addition, he avers that agents use structures to complete their actions and refers to this phenomenon as duality (Giddens, 1984). The idea of structuration, as propounded by Giddens, is useful in the sense that the ways in which participants engage with the emerging technologies, result in different structures and agencies. While there is interaction between various structures, the way in which these interactions occur may create new structures, or reinforce old ones. In this study, 'cross-cultural engagement' is a structure and so are the emerging technologies. However, the manner in which the

participants learn is understood and necessitated by agency. For the purposes of this study, Structuration Theory was also employed to understand the social practices (actions) that influenced cross-cultural interactions in the sport studies classroom, over two semesters. Consequently, Structuration Theory is interpreted through the duality of structure as outlined below:

- *Signification* is a structural dimension of social practices, which informs the understanding of a human agent's role. Therefore, in this study, it is applied to actions acted out in the classroom and used to understand why the participants interact in cultural clusters. It will also help to interpret how the understanding of their roles changes, when emerging technologies are introduced into their curriculum.

- *Domination* considers the facilities students draw on to reproduce structures of domination. It relies on mobilization of allocative and authoritative resources. Allocative and authoritative resources are the materials, possessions, relationships, attributes that are available for students to use. Therefore, for this study, it will be applied to gain insight into how students elicit power by using resources.

- *Legitimation* as a structural dimension refers to rules or appropriate behaviour. It can determine what can be sanctioned in human interactions, which iteratively produces structures of legitimation. In this study, it will be applied to what participants deem appropriate behaviour in the classroom, regarding their seating preferences, group work, cross-cultural engagement, use of technology and social interaction with peers.

- *Interpretive Scheme:* This is located in the first dimension, which refers to the types of knowledge possessed by actors, which are applied reflexively in the supporting communication. Interpretive schemes are shared knowledge that agents employ to analyse behaviours and events, so that meaningful interaction may be achieved (Chang, 2014). In this study, it is applied to how participants used the emerging technology to change, or reinforce, behaviours in a blended learning space, by drawing on structures that may reproduce the existing social system.

- *Facility:* This is located in the second dimension and relates to the structural elements that constitute organisations' structures of dominations. Facilities allow for the allocation of resources that reproduce social structures of domination. Facilities allow for power to be wielded in order to reproduce structures of domination. In this study, facilities are the allocated resources, such as digital games, wikis and blogs used in the classroom.
- *Norm:* This is located in the third dimension that relates to organisational rules, which justify conduct as being appropriate, or inappropriate, in social settings. As a result, components deemed normative are based on actions that centre on social relations, which are underpinned by rights and obligations of those, who participate across a range of interactive contexts (Chang, 2014).
- *Communication:* Signifies how human students communicate and interact with one another by drawing on interpretive schemes. This is an agentic activity that is linked to the first dimension (signification).
- *Power:* Facilitates the movements of resources, such as digital games, wikis and blogs, as well as the attributes of these resources.
- *Sanction:* Determines the repercussions of behaviour/interactions that may, or may not be deemed appropriate. In this study, it is used to explain and understand how the use of emerging technologies in a group setting mediates human interaction and consequences for these interactions.

The following section offers insight into how Authentic Learning is used as part of the theoretical framework of this study. As an underlying strength of social-constructivism, the benefits of Authentic Learning practices offer realistic settings, which are relevant to job and out of classroom performance. While social constructivism provides some comprehension about historical traces of apartheid (structures), and how it has affected student engagement, Structuration Theory offers insight into how these structures are produced and can be reproduced. Both social constructivism and structuration theories are exceptionally strong in aiding individuals to understand the contexts, in which students operate, however, Authentic Learning offers a useful platform to simulate the real world experiences in which students have to interact, participate and offer solutions in a diverse cultural setting.

2.5. Authentic Learning

Authentic learning is a developing strategy used in a variety of higher education programmes (Oliver, Herrington, Herrington & Reeves, 2007). The task of this type of learning reflect the kind of activities that people do in the real world (Herrington & Kervin, 2007) and requires a classroom context that is purposeful, motivational and practical (Jobling & Moni, 2004). While authentic learning typically focuses on real world, complex problems and their solutions, the learning environment is fundamentally multi-disciplinary (Lombardi & Oblinger, 2007).

Nine elements have been offered by Herrington, Reeves and Oliver (2010) as guidelines for authentic learning in education:

1) Provide an authentic context that reflects the way the knowledge will be used in real-life;

2) Provide authentic activities;

3) Provide access to expert performances and the modeling of processes;

4) Provide multiple roles and perspectives;

5) Support collaborative construction of knowledge;

6) Promote reflection;

7) Promote articulation;

8) Provide coaching and scaffolding; and

9) Provide for authentic assessment of learning within the tasks (see Table 2.2).

Given the current availability of technological and electronic media advances, these elements can be fused with student-centred technological approaches that are meaningful and conducive to the ways in which today's learners engage with life-world environments (Bozalek *et al.* 2013, Wankel & Blessinger, 2013; Herrington & Kervin, 2007).

Due to the continuous development of emerging technology tools, lecturers have an opportunity to offer students a more authentic learning experience. These experiences may be one that allow for the use of the internet and the tools it is able to support (Lombardi, 2007). Technology should support cultural, social and other complex human interactions to positively impact student learning (Amory, 2012). Therefore, authentic learning is used as a set of principles as part of this study.

Table 2.2: Elements of authentic learning environments. [Tabulated and adapted from Oliver, Herrington, Herrington & Reeves (2007: 5) and Herrington, Reeves and Oliver (2010)]

	Elements of Authentic Learning	Characteristics of Authentic Learning Environments
1	Provide Authentic context	The physical / virtual environment that reflects the way knowledge will ultimately be used. It mirrors the complexity of a real-life setting.
2	Authentic task	The task activities that have real world relevance. They are ill-defined, complex, and comprehensive and provide students to define the tasks and subtasks to be completed. It allows for prolonged engagement where the activity may be completed over an extended period. An opportunity exists for students to detect relevant and irrelevant information from various sources. The authentic task may be integrated across subject areas.
3	Access to expert thinking and modelling of processes	While there is an opportunity for learners to engage with other, more knowledgeable counterparts, an opportunity exists, where learners can access expert thinking in the learning environment. An opportunity to share narratives and stories about professional practice is evident.
4	Provide multiple roles and perspectives	Students are afforded opportunities to explore different perspectives from various points of view. This allows students to intersect the learning environment by using learning resources and materials for multiple purposes.
5	Support collaborative construction of knowledge	Students are afforded an opportunity to work in groups with appropriate assessment measures in place for collaborative group effort.
6	Promote reflection	Students are given an opportunity to compare their thoughts and ideas to experts, teachers and other knowledgeable students. They are enabled to make their own decisions on how to complete the task. Students should be able to move freely in the environment and return to any element at their own discretion. As a result of working in groups, the discussions students have whist completing the task is considered as social reflection.

7	Promote articulation	The complex task incorporates inherent opportunities to articulate beliefs and growing understanding. Because of group encouragement, the articulation of multiple ideas is fostered. Public presentation may enable articulation.
8	Provide coaching and scaffolding	The lecturer or tutor is available for assistance for a significant portion of the activity. Collaborative learning allows for abler students to assist with coaching and scaffolding.
9	Provide for authentic assessment	An opportunity for students to refine their final product to the extended period given to complete a task. The assessment is integrated into the activity and not assessed by means of separate testing. There are multiple assessment measures for one task.

Amory (2012) argues that when technology functions as a tool, it mediates knowledge construction in an implicit and explicit way. In addition to being theoretically sound, designing authentic learning tasks can provide an innovative learning space that is rewarding for both the lecturer and the student (Herrington & Kervin, 2007). Besides, Herrington and Kervin (2007) postulate that various forms of technology may be an enabling mediator for the nine authentic learning principles.

It is suggested that authentic learning is a necessary means to introduce complex learning activities into the education space, which challenge students in the same way as they would after graduation (Bozalek *et al.,* 2013). In South Africa, substantial progress has been made using emerging technologies and authentic learning, which suggests that there is recognition among scholars of interplay between emerging technologies and effective teaching practices (Bozalek *et al.,* 2013).

2.6. Conclusion

In this chapter, the researcher aimed to provide insight into the use of socio-constructivism as the underpinning philosophy that guides this study. In addition, the literature regarding Structuration Theory and Authentic Learning are encapsulated in this chapter, all of which are used in this study. The significance of Structuration Theory to explain student actions, when using emerging technologies as tools in the classroom, was also presented. Lastly, an explanation of Authentic Learning was offered because of the innovative learning task developed in the intervention for this study.

The next chapter will present the literature review of this study.

CHAPTER THREE

LITERATURE REVIEW

3.1. Introduction

This chapter comprises a literature review that covers aspects of student engagement and contentions in higher education, as well as game-based learning, wikis and blogs, as emerging technologies in education. According to Maxwell (2006, p. 28), a literature review in a dissertation is 'intended to inform a planned study'. The aim of this review is to highlight how the inequities of the past have left its traces on the current higher education's social system. In addition, through this review, the author intends to explore how emerging technology tools could mediate the impact of these inequities.

3.2. Student Engagement

Kuh (2007) suggests that student engagement is a predictor of student satisfaction and student success. Student engagement is defined by two key components; first, "what students do" (the time and energy they devote to educationally purposive activities); and second, "what institutions do" (the extent to which they employ effective educational practices to encourage students to do the right things)" (CHE, 2010, p. 3). While this definition does not explicitly take into account the social elements of engagement, for the purpose of this study the research of Kuh (2007) is interpreted as, exploring cross-cultural interaction (what students do), while engaged with content, using emerging technologies (what institutions do).

Nagda and Zuniga (2003) assert that cross-group interactions, when structured with a collaborative process, could play a role in building multicultural communities. In sport studies, therefore, it is crucial to facilitate 'cross-group interactions' through the use of collaborative emerging technology tools, such as digital games, wikis and blogs, so that an additional outcome (not measured in this thesis), may impact on students' global citizenship. These cross-group interactions become critical in the sport studies classroom, considering the diverse nature of the classroom population, as students tend to engage in social practice and interactions with students from the same, or similar, cultural groups. Ravjee *et al.* (2010) attributes this social phenomenon to the probability that students may have grown accustomed to more

homogeneous learning environments, over several years, which accounts for the lack of engagement with people outside their cultural, ethnic and/or race groups. The reason for this social phenomenon will be comprehensively explored in this study, while the emphasis is placed on a need for facilitative opportunities and processes to support meaningful engagement across differences (Nagda & Zuniga, 2003).

The CHE (2010) suggests that, although academic preparation and motivation are two key variables for student throughput, the implementation of stringent admissions criteria at Higher Education Institutions, are not viable in a century where enrolled students hail from diverse backgrounds. In addition, relevant literature compounds the issue by suggesting that senior students are more likely to drop out of university (Kuh, 2007). A potential reason for this phenomenon is linked to the inter-generational deprivations of some South African university students, who hail from poor families and face challenges, such as, inadequate living quarters, financial problems and limited social mobility (Letseka & Maile, 2008). This dilemma supports the view that the historical traces of an apartheid system still explicitly impacts negatively on the lives of (particularly) historically disadvantaged students. Given the history of group segregation in South Africa, highlighted by contemporary tensions in the South African society, as well as the institutions of higher learning, the lack of cross-cultural student engagement is entrenched in the legacy of segregation. Unfortunately, the history of group segregation is still reproduced in the classroom; therefore, cross-cultural social interactions, with the use of emerging technologies, could offer innovative ways to facilitate interaction between non-homogeneous groups in the sport studies classroom.

Universities could, and should, maximize favourable conditions for this social and personal development to transpire. A wide range of multidimensional activities, planned as long-term interventions, which deliberately create inter-racial connections (both inside and outside the classroom), should be implemented by these institutions of higher education, in order to ensure that students develop optimally, through exposure to diversity (Hurtado, Millem, Clayton-Pederson & Allen, 1999). Institutions, therefore, should engage with students on their arrival to express the realities of academic programmes. It is imperative that institutions consider historical legacies, in order to create an environment that offers better opportunities for engagement in a multicultural institutional setting. This current study, therefore uses emerging technologies to uncover the reasons why cross-cultural student engagement does not take place in culturally rich classroom environments. The researcher's intent is also to understand the

mental structures (such as cultural clustering) that inform the actions of students through the development of a social-constructivist game-based learning model.

Noonan and O'Neill (2012, p. 75) suggest that student engagement, which is linked to student success, remains an area for international policy and research interest, especially during the transition year into higher education, and subsequently, into the more senior years. The reasons include:

- "Completion rates for students"
- "The implications of on-going diversification of the student profile and access to higher education"
- "The responsiveness of higher education institutions in meeting learner requirements";
- "Student engagement and success particularly in the first year."

There is an increasing need to broaden access for students entering the higher education system, so that graduates could enter the workforce and contribute to the economic structures of the country. Institutions of higher education have responded by consistently increasing student intake, and offering flexible curricula (Noonan & O'Neill, 2012). However, this neoliberal view transfers the focus of education to the public/private sector when the focus should be on the improvement student success. For student success to be realise, a number of factors such as student engagement, university experience, academic preparation, peer support and motivation to learn has to be considered (Strydom & Mentz, 2010). Furthermore, Tinto (1999) adds that the structure and environment should be taken seriously for universities to effectively promote student success.

3.3. Contentions in South African Higher Education

South Africa, like many other countries across the world, has its own unique set of challenges that are specific to the nation's context. As mentioned, one of the most notable challenges being faced in higher education is the issue of redress (Badat, 2010). The racial divide of the past continues to reflect the span of access and enrolment at higher education institutions. While there may have been some movement towards redress and transformation post-1994, the traces of the past inequities are still deeply entrenched in the higher education system (Scott, Yeld & Hendry, 2007). This is further marred by a floundering public education system and a high unemployment rate (Spaull, 2013). The Department of Higher Education and Training,

therefore, is under substantive pressure to mediate access. While the number of students entering higher education institutions is escalating, as is the diversity, a challenge still exists in the promotion of success for those, who hail from historically disadvantaged backgrounds (Scott *et al*., 2010). Jaffer, Ng'ambi and Czerniewicz (2007) add that the challenge to success may be obstructed by academic preparedness, schooling background and language.

Although there is an increase (access) in the number of Black students who have enrolled in higher education institutions, the participation rates of African and Coloured students are low. Consequently, the CHE (2009) reported that the participation rates of White students are around 54%, compared with 12% of their Black and Coloured counterparts. This means that while there is an increase in the number of students of colour, the participation of students in the higher education systems is still racially skewed. Scott *et al.* (2007) aver that output figures of higher education institutions are unsatisfactory. Knapper (2001) asserts that in addition to the systemic problems in higher education, the didactic mode of teaching, provides little opportunity for students to integrate their knowledge from different fields, and apply what they had learnt to the solution of real world problems.

Scott *et al.* (2007) argue that curriculum changes should consider prior learning experiences of students. Education practitioners, therefore, have to be attentive when exercising creative practices that take into account the realities of the South African Higher education system. The affordances of education technologies, capable of fostering learning environments that are conducive to the enhancement of learning experiences for students from previously disadvantaged communities, therefore, are highlighted. Although students may access virtual learning environments through various devices (Coiffait, 2012). The affordances of emerging technologies create an opportunity to challenge traditional didactic approaches to teaching and learning, by developing new, novel and innovative ways that can mediate engagement with the view to improving overall success.

3.3. Game-based Learning

Game based learning has become a significant focus of attention in the field of education (Wu, Hsiao, Wu, Lin and Huang, 2011). Given the relevance of game-based learning as a main focus area of this study, the sections which follow provide a review of literature relating to game-based learning.

3.3.1. Game-based learning and engaged learning

Game-based learning has potential to facilitate students' active participation, as well as engaged learning, and embodies principles of learning (Squire, Giovanetto, Devane & Durga, 2005). There are a number of characteristics to engage students in games offering potentials, such as, imaginary, challenges, competition, fantasy, curiosity, uncertainty, goal decisions, discussion and emotional connection (Chen, Liao, Cheng, Yeh & Chan, 2012; Malone and Lepper, 1987). This game-playing process, therefore, supports the learning process, by allowing players the opportunity to obtain learning experiences in games, encouraging interactions between players, as well as the game system, and situating players in complex learning environments (Huang, 2011).

Amory, Naiker, Vincent and Adams (1999) indicate that games, as a learning tools, could provide learners with sufficient stimulation to allow them to engage in knowledge discovery, while simultaneously developing new skills. From a constructivist perspective, the implementation of digital games for this study, therefore, may allow for the generation of new knowledge. In addition, the development of new skills may affect the development and production of new social norms, which may improve cross-cultural interactions in the classroom. Exploring new ways of ICT-based instructional design, therefore, is encouraged and learners are provided with the opportunity of, simultaneously, acquiring skills and competencies, through cross-cultural engagement, which would later be required in the real world. Additionally, the legacies of an oppressive system may be diminished, as new social norms may be produced.

As a pre-curser for re-engagement, through playing a game, the learner should be motivated to repeat cycles within a game context. Garris, Ahlers and Driskell (2002, as cited in Pivec, 2007) identify this as *persistent re-engagement*, with the player returning to the task unprompted. While repeating the game, the learner is expected to elicit desirable behaviours, based on emotional or cognitive reactions, emanating from interaction with, and feedback from, game play (Pivec, 2007). The student, therefore, is able to access and play the game outside of the traditional classroom and engage meaningfully with the content, which is particularly relevant to this study

Feldon and Kafai (2008) indicate that the rationale behind game design in virtual worlds is that it offers opportunities to engage students in a non-traditional environment. Grimly, Green, Nilsen & Thompson (2012) stress the importance of matching the use of computer games closely to the needs of the student learning, rather than just the motivational value. In addition, they claim that students found the game-mode more challenging than the lecture mode.

Lecture-based instruction has been the major method of instruction in tertiary institutions for many years and will probably endure for many more years to come (Grimly, Green, Nilsen & Thompson, 2012). The advantage of lecture-based instruction is that it is efficient and economic, especially in these times of economic hardship (Grimly, Green, Nilsen & Thompson, 2012). However, lecture-based instruction tends to adhere to the transmission model of education and, therefore, its effectiveness can be debated, when compared with more interactive approaches (Grimly, Green, Nilsen & Thompson, 2012).

Game-based learning could be applied as an additional option to classroom lecturing. Prensky (2001) indicates that while there is no consensus on exactly how people learn, almost all theories recognise that having learners engaged in the process is vital. Learning can be an intrinsic motivator for some students; however, not all students are alike. Therefore, an engaged learning tool, such as a digital game may offer a form of motivation to be a more engaged learner. This does not mean that learning cannot be fun, on the contrary, digital game-based learning is precisely about fun and engagement; the coming together of serious learning and interactive entertainment, into a newly emerging and highly exciting medium (Prensky, 2001).

3.3.2. The constructivist nature of digital games

The major characteristics of the constructivist approach are interaction, coping with problems, understanding of the whole (Pivec, 2007). From the constructivist point of view, learners are active participants in knowledge acquisition, and are engaged in restructuring, manipulating, reinventing and experimenting with knowledge to make it meaningful, organised and permanent (Pivec, 2007). In a game-like learning environment, learning by doing – active learning and experiential learning – steps into the foreground (Pivec, 2007). Many game-based learning initiatives provide a rich

context to help learners construct higher-level knowledge, through ambiguous and challenging, trial and error opportunities (Van Eck, 2006). It is important to consider this for reflective learning, as students are able to construct knowledge through a process of trial and error, using the digital game. Additionally, Pivec and Dziabenko (2004) indicate that pedagogy is one of the major components of successful game-based learning. Wu, Hsiao, Wu, Lin and Huang (2012) suggest that the connection between learning theories and game-based learning is still vague. This study has attempted to fill the gap in theoretical understanding of the game-based learning, by applying socio-constructivist learning theories, in order to develop a game-based learning model.

Kirkpatrick (1994) includes both the effective and cognitive factors, while describing learner reaction as being important. For example, a learner's motivation to engage with learning material is an important aspect of these reactions, therefore, instructors need to engage students and instil intrinsic motivations to learn. In this study, learning material is embedded in a digital game, which engages students in a novel, innovative way, in the hope of also motivating them to learn.

Pivec (2007) proposes that games are played, firstly, to have fun, to immerse into an imaginary world, to accept the challenge, outsmart the opponents and/or win (achieve the goal of the game). The students are provided with an opportunity to challenge their classmates, since they play and compete in teams, which is relevant to this current study. In addition, it will offer insight into the production and reproduction of social practices of interaction and engagement, which are confined within cultural clusters.

According to Pivec (2007), part of the process of choosing games for learning also includes consideration of various constraints and opportunities in the learning setting, for example, size of student group, technical possibilities for students, ICT skills of students, ICT skills of the teacher, or licensing. Digital game-based learning is an alternative that is being used, with amazing and increasing success (Prensky, 2008). There are specific educational domains where game-based learning concepts and approaches have a high learning value. These domains are interdisciplinary topics, wherein skills, such as critical thinking, group communication, debate and decision-making, are of high importance (Pivec, 2007). Pivec (2007) indicates that games are becoming a new form of interactive content, worthy of exploration. As mentioned previously, the intention of game-based

learning is to address new ways of ICT-based instructional design, while simultaneously providing learners with the possibility of acquiring new skills and competencies required in the business world.

Educators often compare video games to the act of teaching and do not always embrace the cognitive learning that modern commercial computer games offer. However, being an e-learner often means being confronted with boring, poorly structured learning materials, in the form of PDFs and PowerPoint slides (Pivec, 2007). Learning within LMSs, where interactions prove to be complicated, the entire e-learning process is still focused, in most cases, on the replication of facts and data, instead of on challenging the learner and enabling active interaction with knowledge. The question arises as to whether modern e-learning technologies really support learning, or whether game-based learning provides a more appropriate platform (Pivec, 2007).

Huang (2011) indicates that studies in education and instructional design have been conducted with the intention of finding effective interventions that could increase and sustain learning motivation. He claims that, with current technologies, insufficient emphasis has been placed on the motivational impact, induced by complex learning environments, enriched with multimedia and interactions. Wu, Hsiao, Wu, Lin and Huang (2012) indicate that game-based learning could provide a rich context to help learners construct higher-level knowledge, through ambiguous and challenging trial-and-error opportunities (Van Eck, 2007, as cited in Wu, Hsiao, Wu, Lin and Huang, 2012). Grimly, Green, Nilsen and Thompson (2012) highlight that the interactive nature of the game is important in the learning process and this active engagement is the difference between traditional instruction and computer games. However, it could be argued that most of the learning at tertiary level occurs post-instruction and that lectures are merely catalysts for more self-regulated learning, thus negating the need for interactive instruction.

From a teachers' perspective, it is the use of games for learning, to reach a new generation of learners, through a medium that they are accustomed to interacting with from childhood. Games could be used to introduce a new learning topic, thereby raising the learners' interest in this topic, or as a complementary activity for many other reasons, for example, to create a complex learning opportunity, to increase motivation, or to offer

alternative manner of interaction and communication (Pivec, 2007). In some cases, the use of games helps to establish dialogue, or breaks social and cultural boundaries, as would be the case in this current study. Games could also be used for personal development, as well as improve the self-esteem of the player (Pivec, Dziabenko & Kearney, 2005, as cited in Pivec, 2007).

In general, games could be used as a tool to teach concepts, by immersing the players in experiences and providing spaces where knowledge is useful. It could also be useful to model expert problem solving, while calling attention to key features of the problem through cues, and structuring problems, so that the player builds on previous understandings (Bransford, Brown & Cocking, 1999; Gee, 2003; Squire, 2003, as cited in Squire, Giovanetto, Devane & Durga, 2005). Avedin and Sutton-Smith (1971, as cited in Huang, 2011) argue that playing instructional games allows learners to control a disequilibrium system, wherein players continuously devise, implement, evaluate, and revise new strategies to restore to the system to equilibrium state. Pivec (2007) claims that games should be viewed in a learning context, as opposed to an activity for the leisure, as it demonstrates the learners', as well as the teachers' perspectives of using games for learning. From the learners' point of view, using a game for learning can have various meanings, for example, learning to have fun, taking the challenge and achieving better scores, trying out different roles, being able to experiment and seeing what happens, being able to reflect about certain situations (Pivec, 2007).

Prensky (2001, p. 17) asserts that the use of digital game-based learning suggests:

- That motivation can finally be found to learn subjects and content that are the most difficult to teach or train, either because they are extremely dull, or extremely complicated, or both, and to convince individuals to train themselves.
- That a small group of trainers, teachers, content experts and game designers working together can create experiences that will radically improve the learning, and ultimately the competence and behaviour of thousands, and potentially millions, of learners.
- That the free market will create the engagement driven, experience centred, fun approach to the interactive entertainment and games world, with effective

techniques to teach the material, facts, concepts, skills, reasoning and behaviours that students and workers are required to learn.

The main characteristic of an educational game is that instructional content is blurred by game characteristics. Kirkpatrick's (1994) four-level model of evaluation, includes both the affective and cognitive skills, and describes learner reaction as important. For example, a learner's motivation to engage with learning material is an important aspect of these reactions, so instructors need to engage students and provide opportunities that are motivate students to learn. A study conducted by Grimly, Green, Nilsen and Thompson (2012) revealed that students perceived the activity of learning using a computer game, as important to them, compared to the lecture experience. Students in the game mode also indicated that, compared to lectures, learning through games was important to others. The challenging and active nature of the game experience, possibly adds quality to the learning experience, thereby maximizing instructional time more effectively. Pivec (2007) suggests that many individuals have grown up playing games and in primary education, games have a high presence in non-formal and informal segments of our learning. Unfortunately, in formal education, games are still often perceived as a lighthearted activity and the potentials of games for learning, often remain undiscovered (Afari, Aldridge, Fraser & Khine, 2013; Pivec, 2007). Game based learning is a novel approach in the university and lifelong learning arena, and in the search for new positioning at universities, in an ever-changing setting of education, gaming is becoming a new form of interactive content, worthy of exploration (Pivec, Dziabenko & Schinnerl, 2003).

Additionally, Pivec and Dziabenko (2004) indicate that pedagogy was one of the major components of successful game-based learning. Wu, Hsiao, Wu, Lin and Huang (2011), however, state that the relationship between learning theories and game-based learning are underexplored. Chen, Liao, Cheng, Yeh and Chan (2012) indicate that game based learning is regarded as a potential method of motivating students to learn, however, different approaches have also been proposed in aforementioned studies. It would appear that classroom subject learning could be enhanced by game-based learning.

3.4. Emerging Technologies

The robust growth of information technology has expedited the acquisition of knowledge and become an important requirement in the learning process (Qureshi, Ilyas, Yasmin & Whitty,

2012). Veletsianos (2010, p. 15) proposes that emerging technologies are technology-enhanced learning, which comprises tools, concepts, innovations and advancements, utilized in diverse educational settings, to serve varied education-related purposes. He also claims that emerging technologies are evolving organisms that experience hype cycles, while being potentially disruptive, not fully understood and, to date, not completely researched.

Technological innovation and advancements have effected massive societal change, however, technology's impact on education and learning has been rather limited (Bull, Knezek, Roblyer, Schrum & Thompson, 2005, as cited in Veletsianos, 2010). The NMC Horizon Report 2011: The technology outlook for UK tertiary education 2011-2016 projected that in the next 2-3 years, game-based learning will be adopted in education systems, globally (Johnson, Smith, Willis, Levine & Haywood, 2011). The report claims that game-based learning has gained considerable traction since 2003, and the potential of gaming in learning has erupted, as has the diversity of the games. The researcher, therefore, is of the opinion that this study is being conducted at an ideal juncture, as it provides an opportunity to create a game-based learning model that may foster cross-cultural interactions in the sport studies classroom. Bozalek (2011) asserts that these technologies have the potential to disrupt current teaching and learning practices in Higher Education Institutions. In this current study, emerging technologies is used to disrupt current social practices of cultural clustering, which are linked to current structures that reinforce the existing social system. It has been revealed that emerging technologies, used appropriately, could enhance communication and critical thinking skills, develop lifelong learning behaviour and facilitate student engagement in ways that promote a deeper understanding of coursework (Henard, 2009, as cited in Bozalek, 2011). For many learners, wikis will be particularly appealing, providing instant, any time, any place, access to a dynamic, ever-building digital repository of user specific knowledge and a voice in a live community of practice (Wheeler, Yeomans & Wheeler, 2008).

The National White Paper on Education (Republic of South Africa, Department of Education [DoE], 1997, p. 1) outlined the need to "redress past inequalities and transform the higher education system to serve a new social order to meet pressing national needs and to respond to opportunities and realities". The draft White paper on e-Education (Republic of South Africa, National Department of Education, 2003) acknowledged that the world is changing and that ICT is central to this change. It has been reported that a global revolution is taking place in education and training, driven by the changing nature of work, the realities of the information

age, new global partnerships and an awareness of the need for equal distribution of educational opportunities (Republic of South Africa, Department of Education [DoE], 2003). Additionally, the South African Institute for Distance Education (Moll, Adam, Backhouse & Mhlanga, 2007) indicated that large tracts of the higher education landscape remain unexplored, in terms of potential for e-learning. For many years, the Horizon Reports have analysed the trends for emerging technologies and highlighted the important developments of various technology tools in higher education. These developments are illustrated in Table 3.1.

Table 3.1: Important developments for Emerging Technologies in Higher Education

PERIOD	2012	2013	2014	2015
0-1 Year	Mobile Apps Tablet computing	Massive Open Online Courses (MOOC's) Tablet computing	Flipped Classroom Learning Analytics	Bring Your Own Device (BYOD) Flipped Classroom
2-3 Years	Game-based learning Learning Analytics	Games and Gamification Learning Analytics	Games and Gamification 3D Printing	Makerspaces Wearable Technology
4-5 Years	Gesture-based Computing The internet of things	3D Printing Wearable Technology	Quantified Self Virtual Assistants	Adaptive Learning Technology The Internet of Things

(Johnson, Smith, Willis, Levine, & Haywood, 2012; 2013; 2014; 2015)

Table 3.1 above illustrates the developments for emerging technologies in higher education. However, the disappearance of games in 2015 is evident and could perhaps mean that our peers in the Northern hemisphere may be progressing more rapidly. This does not mean that games are no longer relevant in South Africa. In fact, the use of games in current South Africa is consistent with the definition of emerging technologies offered by Veletsianos (2010).

3.4.1. Digital games

Pivec (2007) asserts that games are played, firstly, to have fun, to immerse into an imaginary world, to take the challenge and outsmart the opponents and/or win (reach the goal of the game). Pivec (2007) suggests that part of the process of choosing games for learning, includes consideration of various constraints and opportunities in the learning

setting, for example, size of student group, technical possibilities for students, ICT skills of students, ICT skills of the teacher and licensing.

Kanthan and Senger (2011) indicate that in Britain there is a strong move to create a digital curriculum based on digital game-based approaches, with the aim of motivating the modern student. This move is indicative of the transformation occurring in educational spaces, with gravitation towards the use of modern technology, over the past decade. Despite a considerable amount of attention to game based learning to operationalised and highlight the affordances of game based learning, widespread adoption of game-based learning in the classroom has not been as successful (Denham, Mayben & Boman, 2016). Similarly, Gros (2007) highlights that, in the last decade, an increase in the uptake of digital games in the classroom, regarding the structural aspects, as well as the integration of digital games to improve learning, has occurred. In the digital gaming environment, Gee (2003) emphasises how learners gain resources from classmates to yield problem-solving abilities. For the purposes of this study, this is located at the interaction level, where resources are distributed to produce the social interactions that take place in the digital-games based environment. Concomitantly with these social interactions, the benefits of gaming, at the interaction level, provide unique opportunities for enjoyment, interactivity, feedback and engagement on a sound platform, where learning becomes fun (Kanthan & Senger, 2011). Digital games are user-centred and encourage engagement and cooperation (Gros, 2007), while, simultaneously, offering new generation educators with an opportunity to blend traditional teaching approaches with a modern and authentic style to traditional and contemporary students (Kanthan & Senger, 2011). Digital games connect traditional teaching approaches with the modern technology world, wherein digitally native students are able to interact with the digital migrant educators (Gros, 2007).

3.5. The use of Emerging Technologies in Education

The potential of the Web as a tool for virtual learning or collaboration, critical thinking and engagement is acknowledged (Bonk & Graham, 2004). Commencing in 2004, Web 2.0 became a collective term for a mass movement in society, a movement towards new forms of user engagement, supported by Web-based tools, resources, services and environments (Collis & Moonen, 2008). The potential of the application of Web 2.0 tools and the philosophy to produce

innovation in higher education clearly exists (Collis & Moonen, 2008). However, among the many analyses of factors that influence the use of technology for pedagogical change in formal education, common problems have emerged; the pedagogies, supported by new technologies that could lead to innovation are not adequately known to instructors, not adequately valued, and perceived as too challenging to implement in practice (Collis & Moonen, 2008). Web 2.0 tools and processes have to be perceived as adding quality and benefit to instructional processes, for them to become embedded in the mainstream practice of higher education. This involves several aspects, including the pedagogical approach, instructional integration and support, as well as assessment. Underlying all of these are the philosophies of teaching and learning that instructors, as well as students bring with them to the instructional setting (Collis & Moonen, 2008).

Technology's rapid ascent during the past decades has affected many facets of the 21st century world (Elwood, McCaleb, Fernandez & Keengwe, 2012). While 30 years ago the uses for computers were novel, at present, not only do most classes have at least one computer, students also have access to their own personal computers, including laptops, tablets and cell phones. This is especially true in higher education (Elwood, McCaleb, Fernandez & Keengwe, 2012), but not necessarily for disadvantaged students as a result of unequal levels of access.

Kvavik (2005) indicates that the new generation of technology-savvy students who are currently in and entering higher education, are much lauded. Some students possess unprecedented levels of skill in information technology. They approach and use technology very differently to earlier student cohorts. Online learning is pervading higher education, compelling educators to confront existing assumptions of teaching and learning in higher education. Undeniably, leaders of higher education are challenged with positioning their institutions to meet the connectivity demands of prospective students, as well as meeting growing expectations and demands for higher quality learning experiences and outcomes. Given the increasing evidence that Internet information and communication technologies are transforming much of society, there is little reason to believe that it will not be the defining transformative innovation for higher education in the 21st century (Garrison & Kanuka, 2004).

3.5.1. Wikis

Calabretto and Rao (2011) attest that wikis have been used effectively for educational purposes, including knowledge building, teamwork and increased participation. In their work, they indicate that the use of innovative techniques ensures student learning and understanding, and promotes student engagement and knowledge. Hazari, North and Moreland (2009) indicate that the use of Web 2.0 tools is increasing in academia. Since the earliest uses of the World Wide Web for teaching and learning, one of the most powerful elements has been the ability to engage learners in an inactive format (Hazari & Schnorr, 1999; Chandra & Lloyd, 2008, as cited in Hazari, North, Moreland, 2009). As technology continues to become commonly used for global communication and productivity, technology skills must be incorporated by educators in the delivery of curriculum content. Wheeler, Yeomans & Wheeler (2008) indicate that wikis enable students to collaboratively generate, mix, edit and synthesise subject specific knowledge, within a shared and openly accessible digital space. The combined knowledge of the group-dubbed 'the wisdom of the masses' is assumed greater than that of the individual, and the group that creates the wiki space is the same group that reads it (Owen, Grant, Sayers & Facer, 2006 in Wheeler, Yeomans & Wheeler, 2008). The results of a study conducted by Wheeler, Yeomans and Wheeler (2008) revealed that with any new technology, or approach, the use of wikis in formalised education, engenders issues and challenges for teachers. One of the first issues to address is the need to familiarise students with the concept of wikis and orient them to the architecture of the software. Wikis can be used to encourage collaboration among students, by allowing them to read and edit each other's work. Collaborative writing assignments with wikis encourage students to review each other's pieces and truly reflect on, as well as critique, what is being put together, instead of merely pasting separate components together (Ben-Zvi, 2007, as cited in Deters, Cuthrell & Stapleton, 2010).

Molyneaux and Brumley (2007) indicate that the potential for collaboration has driven educational usage, with wikis being used throughout education from school to post graduate work. Molyneaux and Brumley (2007) established that:

a) students perceive that the use of the wiki has significantly enhanced the process and the product of their group project work;

b) the wiki improves the sharing of knowledge and information, within the group;

c) the wiki provides documentation of the engineering project development; and

d) the wiki provides good insight into group dynamics.

Hazari, North & Moreland (2009) found that wikis can promote collaboration in group assignments, encourage negotiation, and make students comfortable with the new generation of technology tools. To incorporate wiki technology, educators should use participatory approaches, in which users become active contributors and producers of content. Students can build collectively on each other's knowledge, by forming 'participatory communities'.

Wheeler, Yeomans and Wheeler (2008) conclude that students need to develop skills to ensure that they are adequately equipped to participate fully in the knowledge-based economy of the 21st century. These skills include, knowing how to work independently, without close supervision, and being creative (DfES, 2006, as cited in Wheeler, Yeomans & Wheeler (2008). Wikis would appear to be well suited for teachers to extend the skills of students in their care. Wheeler, Yeomans and Wheeler (2008) further assert that collaboration, rather than competition, should be emphasised as a key aim of any wiki-based activity. Students are also encouraged to contribute to the wiki outside the classroom contact hours, to share their thoughts, useful resources and discoveries, as they generate them. When in class, wiki content should be an activity, integrated into the fabric of lessons. Teachers should act as moderators, rather than instructors, and may need to restrain themselves from direct action, in order to promote free and democratic development of content, according to the principles embodied in the 'wisdom of the masses. Wheeler, Yeomans and Wheeler (2008) also concluded that of the many emerging Web 2.0 software applications, wikis have the potential to transform learning experiences of students worldwide. The benefits appear to outweigh the limitations. For many learners, wikis will be particularly appealing, providing instant, any time, any place access to a dynamic and ever building digital repository of user specific knowledge, and a voice in a live community of practice.

Ebner, Kickmeier-Rust and Holzinger, (2008) state that generally, the characteristics of technology-enhanced learning are interactivity and the well know expression, A^3 (A-cubed) – Anytime, Anywhere, Anybody. Wikis highly support these characteristics. Learners may contribute to a common pool of knowledge and become actively engaged

in interactive collaborative work, either interacting with the content [active or passive], with instructors [computer-mediated communication], or with other learners [collaborative learning] (Ebner, Kickmeier-Rust & Holzinger, 2008). This degree of freedom and the possibilities of interaction and active contribution are considered important factors for successful learning (Bruns & Humphreys, 2005; Mitchell, Chen & Macredie (2005) as cited in Ebner, Kickmeier-Rust & Holzinger, 2008). Cole (2009, p. 146) found that wikis had little impact on student engagement, simply because the participating students chose not to post to the wiki; however, what the author did find was a significant level of curiosity expressed by students and the reason for the poor engagement was because of the 'unattractive course design' and not the technology tool.

Owen *et al.* (2006, as cited in Guth, 2007) indicate that wikis, like other social software tools, such as blogs, are being used more and more in educational settings. This is taking place at the same time that "educational agendas are shifting to address ideas about how we can create personalised and collaborative knowledge spaces, where learners may access people and knowledge in ways that encourage creative and reflective learning practices that extend beyond the boundaries of the school sans the limits of formal education" (Guth, 2007, p. 61). Wikis typically provide functions that support the simple management of web pages, linking to internal and external content, insertion of graphics and images, as well as the basic editing of text (Calabretto & Rao, 2011). Despite positive reports of wiki use in the education setting, the full potential of wikis in higher education, remains to be realized (Calabretto & Rao, 2011). From a pedagogical perspective, a wiki is intended to evolve into a shared repository of growing knowledge over time, which is in keeping with the scaffolding approach to education, facilitating the students' ability to build on prior knowledge (Fountain, 2005 and Van Der Stuyf, 2007, as cited in Calabretto & Rao, 2011). Shrand (2008, as cited in Hazari, North & Moreland, 2009) suggests that the use of technology in education has several benefits for motivating students. Shrand further states that technology could facilitate more active student learning in the classroom, and could appeal to multiple intelligences and different learning styles. No longer are users' passive recipients of information, which can only be printed or read, currently the same users can add information to the web environment, in which they interact with other interested members.

Previously, discussion/bulletin board tools were used to foster group collaboration in course management systems (Ansorge & Bendus, 2004, as cited in Hazari, North & Moreland, 2009). At present, with social computing platforms being widely available, several wiki tools have emerged and research is needed to determine the pedagogical efficacy of these tools for teaching and learning. When contributing to a wiki project, students are not only writing for the teacher, as is the case in traditional classroom environments, but for, and with, their peers; they promote collective authoring, which, inherently, entails peer review. Often, students are hesitant to intervene on their peers' written work (Lund & Smordal, 2006, as cited in Guth, 2007); however, through the discussion, or comment, functions available on most wikis, they can learn how to provide constructive criticism (Guth, 2007).

When editing a public wiki, students must critically read what has already been written by unknown individuals, paying more attention to the content, structure and style, in order to see what needs to be modified, or added, and how to write contributions. On a private educational wiki, it is often students, together with the instructor, who decide on the form and structure, whereas on a public wiki, students must adapt to existing ground rules.

Hazari, North and Moreland (2009) indicate that Web 2.0 technology can be considered an extension of the previous generation of web technology tools that presented information to the user, but did not allow for much interaction. Information was presented in a 'read-only' mode and any interaction would take place in a different environment (Hodgkin & Munro, 2007, as cited in Hazari, North & Moreland (2009). Collective Intelligence is an idea that individuals can build collectively on each other's knowledge by forming 'participatory communities'. Ebner, Kickmeier-Rust and Holzinger (2008) claim that when principles of freedom are promising, from the perspectives of collaborative work and collaborative learning, the occasional irresponsibility of the users is a severe disadvantage. The evolution of social software has gone beyond reading static web pages and listservs, to engaging in more interactive chat rooms and web pages. Some current technologically perceptive college students are well aware of social software, such as Wikipedia, Facebook and blogs. At present, the university professors are trying to incorporate these new versions of social software into their classrooms, meet the needs of 21st Century learners (Deters, Cuthrell & Stapleton, 2010). Hazari, North & Moreland

(2009) state that despite the potential benefits of using wikis for course assignments, grading wiki assignments can be a challenge for instructors. With the advent of new types of customised Web learning environments, it is necessary to determine whether these environments are meeting the needs of learners. Mechanisms must be incorporated in Web-based environments to evaluate the medium, content, format, design and structure, in order to facilitate timely intervention, when a problem is identified.

Hazari, North & Moreland (2009) found that technology has been used as an enabler to facilitate learning. It is, however, important to note that no single technology can affect learning outcomes. There are the challenges and benefits of using wikis in education; they help students let go of individual ownership, students learn to collectively author pages and can start to overcome the traditional epistemology of most Western educational systems, which involves promoting individual ownership of what is written. Writing in a distributed, collaborative environment teaches students network literacy (Lamb, 2004, as cited in Guth, 2007). Research has revealed that when writing on wikis, students have a tendency to edit only the contents they had created, expressing individual ownership for those contents, even when their peers have provided feedback, or edited 'their 'pages.

Results from Guth's (2007) study revealed that writing on a public wiki promotes collaboration beyond the classroom, and knowledge sharing gives students a sense of empowerment. When viewing the possibilities of wiki systems, a high congruence can be found with aspects of the universal concept, in particular, the possibility of obtaining, creating and maintaining a wide pool of information resources, as well as interpersonal communication facilities, thereby enhancing the learning experience of students at universities worldwide (Reinhold & Aabawi, 2006, as cited in Ebner, Kickmeier-Rust & Holzinger, 2008). There is a growing interest in the educational uses of wikis, as working collaboratively in a wiki presents significant changes for teachers and learners (Lund & Smørdal, 2006). Cole (2009) indicates that the educational use of a wiki does depend on a teacher's preferred model of learning.

3.5.2. Blogs

Web logging, commonly referred to as blogging, is a form of micropublishing (Williams & Jacobs, 2004). Blogs are a related Web information sharing technology, which contain dated entries, in reverse chronological order, about a particular topic (Boulos, Maramba & Wheeler, 2006). These entries contain commentary and links to other Websites and images, as well as a search facility. Blogs can also engender the drawing together of small virtual groupings of individuals, interested in co-constructing knowledge around a common topic within a community of practice (Boulos, Maramba & Wheeler, 2006). A standard blog as used in this study, has features that include easy posting, archives of previous posts, and a stand-alone Webpage for each post to the blog, with a unique URL (Boulos, Maramba & Wheeler, 2006).

Blogging is widely recognised as a web-based communications tool, which is easy to use on the internet (Williams & Jacobs, 2004). Fortified as a product of convenience, blogs have developed along similar lines as other forms of communication. They boast a level of participation unlike earlier technology tools, such as wikis (Williams & Jacobs, 2004). Consequently, blogs have been identified as valuable pedagogical tools to facilitate engagement among peers and may facilitate ideas and enable students to reflect on diverse learning experiences (Frantz & Rowe, 2013). Students are adept at creating new content on blogs and are accustomed to working collaboratively in online communities, based on their own personal interests (Lombardi & Oblinger, 2007)

3.6. Summary of the chapter

This chapter comprised a literature review on the key concepts of this study. Literature was reviewed on the topic of education in South Africa, as well as the implications of an apartheid system and its policies on educational access. This chapter also addressed Literature on game-based learning, within a social-constructivist space were also addressed. Finally, literature regarding the emerging technologies of digital games, wikis and blogs were explored. The following chapter will provide the methodological approach adopted for this study.

CHAPTER FOUR

METHODOLOGY

4.1. Introduction

This chapter commences with an outline of the methodological approach adopted for this study. The aim of this study was to explore the production and reproduction of cross-cultural interactions, critically, using digital games in sport studies. The researcher adopted a mixed method approach, using a sequential exploratory mixed method design to explore the research phenomenon presented in this study.

4.2. Mixed Methods Research

Mixed methods research (MMR) is defined as a research approach that "combines and integrates quantitative and qualitative approaches" (Gelo, Braakmann & Benetka, 2008, p. 13). The mixed methods approach could be viewed as the third paradigm for social research because of the way it combines quantitative and qualitative methodologies based on pragmatism and a practice-driven need to mix methods (Tashakkori & Teddlie, 2003). Health science research, in which sport studies is located, has prioritised the development of new methodologies to improve the scientific strength of data, which has led to an increase in diversity in the methodological approaches adopted (Creswell, Klassen, Plano Clark & Smith, 2011). Denscombe (2008) claims that some researchers use mixed methods to produce a more complete picture, by combining information from complementary kinds of data, or sources. Mixed methods have been used to avoid bias intrinsic to single-method approaches, as a way of compensating specific strengths and weaknesses associated with a particular method (Denscombe, 2008).

As a research approach, one of the properties of the mixed methods is that it retains rigorous quantitative research by evaluating scale, size and frequency of constructs, and rigorous qualitative research exploring the meaning and understanding of constructs (Creswell, Klassen, Plano Clark & Smith, 2011). This is especially valuable in this study because of the complex nature of the diverse South African higher education classroom. Firstly, the diversity of the classroom should provide a rich environment for cross-cultural engagement; however, this is

hindered by various structures that inform the actions of students. Secondly, the history of apartheid has had a proxy effect on the actions of students, despite them not experiencing the regime directly. Lastly, since sport is seen as a microcosm of society, it creates an aperture to uncover a social phenomenon of cultural clustering. Therefore, the use of mixed method research is suitable for the current study, as it offers the complete picture by combining these complex social phenomena's. Optimally, all studies draw on one, or more, theoretical framework/s from the social, behavioural or biological sciences to inform all phases of the study. Mixed methods provide opportunities for integration of a variety of theoretical perspectives (Creswell, Klassen, Plano Clark & Smith, 2011). Therefore, this current study draws on three theories, namely, Structuration Theory, Social Constructivism and Authentic Learning, as highlighted in Chapter 2, providing further justification for the use of a mixed method approach that would allow for the integration of various theoretical perspectives in a manner that may be new and novel. Mixed methods is more than simply collecting qualitative data from interviews, or collecting multiple forms of qualitative or quantitative evidence. As a research paradigm, the mixed methods approach incorporates a distinct set of ideas and practices that separate the approach from the other main research paradigms (Denscombe, 2008). However, it may also involve the intentional collection of both quantitative and qualitative data and the combination of the strengths of both, to answer the research questions (Creswell, Klassen, Plano Clark & Smith, 2011).

In this study, an advanced intervention approach was adopted, wherein the primary mixed method design is a sequential exploratory mixed method design in two phases. Phase 1 was conducted from June-December 2013 and Phase 2 from June-December 2014. The intent of this two-phase sequential mixed method study was to explore whether a game-based learning approach can shape and reshape social practices of cross-cultural engagement in the classroom, therefore, underpinning the theoretical orientation of this study. In 2013, Phase 1 included a Quantitative Baseline Survey; two (2) Qualitative Focus Groups, as the second stage; and a Quantitative Post-Intervention Survey as the third stage. Since this current study is located in the field of teaching and learning in higher education, a form of single-study design was used. This was done to evaluate the effect of the digital gaming intervention on cross-cultural interaction. Therefore, all participants in this study formed part of an experimental group who received the intervention. Since there was no control group, often as is the case with applied research in education, the participants in this study served as their own control group.

The baseline survey data were gathered to assess the participants' knowledge and understanding of digital games, level of engagement, study preferences, participation in social networks and their views on teaching practices in sport studies. Stage 2 in Phase 1 of this current study was the qualitative segment, which interrogates human agency that is manifested in the way the participants interact in the classroom. This was undertaken in order to understand the underlying structures relating to cross-cultural engagement. The data were collected through focus group interviews. The findings of the qualitative segment were used to determine why cultural clusters were manifested in the classroom, whether or not the tools fostered cross-cultural engagement, and what their experiences were regarding the use of digital games in the classroom. The qualitative segment also sought to establish how cross-cultural interactions were produced and reproduced in the classroom. The information gathered from the qualitative segment was used to inform the redevelopment of the post-intervention survey of the quantitative segment (stage 3 in Phase 1) of this study.

The quantitative segment of this current study (stage 3 in Phase 1), was conducted by collecting post-intervention data, based on the same scales and subscales as the baseline survey (stage 1). In addition, more scales were added based on the information gathered from the qualitative segment (stage 2 in Phase 1). Following this post-intervention survey, the collected data was compared with the data of the pre-intervention baseline survey (stage 1 in Phase 1) to determine whether there was any change in scores for student engagement, learning preference and the use of emerging technologies.

Phase 2 of this study comprised 4 stages: A Quantitative Baseline Survey, as Stage 1; three Qualitative Focus Groups, as Stage 2; a Quantitative Post-Intervention Survey, as Stage 3; and Qualitative Reflective Blog Posts, as stage 4. Similar data collection methods as Phase 1 were followed; however, the main difference was that Phase 2 attempted to augment emerging technologies with the gamified intervention. Consequently, two emerging technology interventions, namely, wikis and blogs were added, whereas the first phase utilised a gaming intervention alone. The purpose of this intentional design was to determine whether games alone had the potential to reshape dominant norms related to cross-cultural engagement, or whether interactions of cross-cultural engagement (as a manifestation of human agency) could recursively reshape the production of dominant norms, when a digital game was augmented with emerging technologies, such as wikis and blogs. This strategy was adopted to determine whether digital games, solely, would facilitate and uncover structures that influence cross-

cultural interactions, or whether a combination of emerging technologies would be best suited to uncover the production and reproduction of cross-cultural interactions. The best way to determine this was to ensure that multiple perspectives were taken into account; therefore, a mixed method, data collection strategy was best suited for this study. Table 4.1 highlights the benefits of using the various approaches in this study.

Table 4.1: Qualitative, Quantitative and Mixed Method Approaches applicable to this study (Adapted from Creswell, 2009).

Ideology	Qualitative Approaches	Quantitative Approaches	Mixed Methods Approaches
Strategies of Enquiry	• Case Studies Narrative Research • Phenomenology • Ethnographies • Grounded theory	• Experimental Designs • Non Experimental designs	• Sequential • Transformative • Concurrent
Philosophical Assumptions	• Phenomenology • Grounded theory • Ethnography • Case study • Narrative	• Surveys and experiments	• Sequential • Concurrent • Transformative
Researcher practices	• Positions him/herself • Collects participant meanings • Focus on a single concept or phenomenon • Brings personal values into the stud • Studies contexts or setting of the participants • Validates accuracy of findings • Makes interpretations of the data • Creates and agenda for change or reform • Collaborates with participants	• Tests or verifies theories or explanation • Identifies variables to study • Relates variables in questions or hypotheses • Use standards of validity and reliability • Observes and measures information numerically • Uses unbiased approaches • Employs statistical procedures	• Collects both qualitative and quantitative data • Develops rationale for mixing • Integrates data at different stages of inquiry • Presents visual pictures of the procedures in the study • Employs the practices of qualitative and quantitative research

Mixed method is a research design with philosophical assumptions based the researcher's worldview on a subject, as well as methods of inquiry (Creswell, 2009). Worldviews provide the foundation for inquiry in all scientific research. Therefore, worldviews inform how researchers conduct, view and undertake research (Gelo, Braakman & Benetka, 2008). Three principal worldviews, namely, objectivism, subjectivism and constructivism have been identified (Gelo, Braakman & Benetka, 2008). Within the social constructivist nature of this study, the constructivist worldview asserts how knowledge is constructed because of the interaction between individuals and their social world (Gelo, Braakman & Benetka, 2008). It may be argued that (mixed) methodology is often reflected in social sciences discipline and is related to speculative theoretical assumptions and ideologies that strengthen a particular approach (Giddings, 2006). As a method, it focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study, or a series of studies (Creswell, 2009). Therefore, mixed methods research provides more comprehensive evidence for studying a research problem than either quantitative or qualitative research in isolation (Creswell, 2007). The complexity in this study highlighted to date, requires comprehensive evidence for examining cross-cultural student engagement, especially at the level of interaction, and how these interactions shape, and reshape their social realities. Thus, a mixed method approach is inarguably the most appropriate method applied to this study.

In addition, as Giddings (2006) posits, methodology guides the researcher by providing a framework for the development of the research question, which ultimately dictates the process and methods to use. The 'methods', in contrast, are how the outcomes are achieved; they are practical means, the tools for collecting and analysing data (Giddings, 2006). Today, the primary philosophy of mixed methods research is that of pragmatism. Mixed methods research is, therefore, an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, perspectives, positions and standpoints (Johnson, Onwuegbuzi & Turner, 2007)

Quantitative data includes closed-ended information pertaining to the objectives of a particular study and this could include attitudes, behaviour and satisfaction (Creswell, 2007). Therefore, for this study, quantitative data was used to determine the social activities of cross-cultural interaction that students engage in, in the classroom. The qualitative data was used to uncover if and how cross-cultural student engagement was manifested in an authentic classroom context.

The analysis of qualitative data typically follows the path of aggregating the words and/or images into categories of information and presenting a diversity of ideas, gathered during data collection. In a mixed method approach, there are three ways of mixing qualitative and quantitative data. These include merging two data sets, connecting two data sets or embedding one data set in the other (Creswell, 2007). Denscombe (2008) indicated that a mixed method approach incorporates distinct ideas that separate one research approach from many others. He also suggests that there are some conflicting views about the way in which elements of the research should be integrated in a mixed method approach. Giddings (2006) asserts that a mixed method approach allows for more diversity in the methods available to researchers dealing with complex problems in practice. A further claim is that a combination of qualitative and quantitative findings could add credence to the research outcomes.

Consequently, this study followed an advanced intervention mixed method approach, using a sequential exploratory design. This study was conducted across two phases that lasted 12 months each. The following section presents the types of mixed method approaches, which include, sequential exploratory mixed method design which is used in this study.

4.3. Types of Mixed Methods Designs

The following research designs are some of the most common designs, with different types of approaches. However, according to Tashakkori and Teddlie (2003), 40 different types of mixed method designs exist. Creswell *et al.* (2011) summarised these classifications into twelve designs. These include Sequential, Concurrent and Transformative designs.

4.3.1. Sequential (explanatory or exploratory) Designs

Sequential designs are commonly used when qualitative and quantitative methods are applied, one followed by the other (Gelo, Braakmann & Benteka, 2008), as is the case of explanatory, exploratory and two-phase embedded designs. In sequential designs, the choice could be either, explanatory (when the quantitative data are collected first), or exploratory (when the qualitative data are collected first). Another design possibility is to have one dataset build on the results from the other. These are sequential designs. They may begin by a qualitative exploration followed by a quantitative follow up (exploratory) or by a quantitative analysis explained through a qualitative follow up (explanatory). A popular approach in the health sciences is the latter, in which qualitative data help to

explain more in depth, the mechanisms underlying the quantitative results. One popular approach is to first explore with qualitative data collection, followed by the qualitative findings, to design a quantitative research instrument to be administered to a sample of the population (Creswell *et al.,* 2011).

Due to the two-phase structure and the fact that not only one type of data is collected at a time, the exploratory design shares several of the same advantages as an explanatory design. The specific advantages are that; a) separate phases make the exploratory design straightforward to describe, implement and report, b) although this design typically emphasises the qualitative aspect, the inclusion of a quantitative component can make the qualitative approach more acceptable to a quantitative-biased audience and, c) the researcher can produce a new instrument as one of the potential products of the research process. Table 4.2 below illustrates one such sequential design process that was adopted in this current study (Teddlie &Tashakorri, 2012).

Table 4.2: Steps for basic procedures in implementing the exploratory design used in this study (adapted from Teddlie &Tashakorri, 2012).

Steps	Activities
Step 1	**Design and Implement the Qualitative Strand**: • State qualitative research questions and determine the qualitative approach • Obtain permissions • Identify qualitative sample • Collect open-ended data with protocols • Analyse the qualitative data using procedures of theme development and those specific to the qualitative approach to answer the qualitative research questions and identify
Step 2	**Use Strategies to build on the Qualitative Results:** • Refine quantitative research questions or hypotheses and the mixed methods question • Determine how participants will be selected for the quantitative sample • Design and pilot test the quantitative data collection instrument based on qualitative results
Step 3	**Design and implement the Quantitative Strand:** • State the quantitative research questions or hypothesis that build on the qualitative results, and determine the quantitative approach • Obtain permissions • Select a quantitative sample that will generalize or test the qualitative results • Analyse the qualitative results using descriptive statistics

	• Inferential statistics, effect sizes answer quantitative and mixed methods questions
Step 4	**Interpret the Connected Results:** • Summarise and interpret qualitative results • Summarise and interpret qualitative results • Discuss to what extent and in what ways the quantitative results generalise to test qualitative results

4.3.2. Convergent (or parallel or concurrent) Designs

A concurrent design is one where the qualitative and the quantitative methods are applied simultaneously (Gelo, Braakmann & Benetka, 2008). When the intent is to merge concurrent quantitative and qualitative data to address the study aims, the investigator combines both quantitative and qualitative data. This design is also known as a convergent design. The data analysis consists of merging data and comparing the two sets of data and results (Creswell, Klassen, Plano Clark & Smith, 2011). This is usually done in one phase. Convergent designs, such as triangulation design, represent the most well-known approach to mixing methods (Gelo, Braakmann & Benteka, 2008). The purpose of this design is to 'obtain different, but complementary data on the same topic'. The underlying idea is to understand a research problem holistically, bringing together the differing strengths and not overlapping weaknesses of quantitative methods with those of qualitative methods.

4.3.3. Embedded (Nested) Designs

The embedded design is a mixed method approach where the researcher combines the collection and analysis of both quantitative and qualitative data, within a traditional quantitative research design or a qualitative research design (Teddlie &Tashakorri, 2012). This popular design in health sciences uses quantitative and qualitative approaches in tandem and embeds the one in the other, to provide new insights, or thinking that is more refined. These designs are called embedded or nested designs. They may be a variation of a convergent or sequential design. In this design, qualitative data may be used prior to the intervention, to inform strategies on how best to recruit individuals, or develop the intervention, during the experiment, to examine the process being experienced by the participants, or after the experiment, to follow up and better understand the quantitative outcomes. (Creswell, Klassen, Plano Clark & Smith, 2011)

4.3.4. Multiphase designs

A multiphase design emerges from multiple projects conducted over time, linked together by a common purpose. These are called multiphase projects and are frequently used in the health sciences. They commonly involve convergent and sequential elements. The project is conducted over time, with links in place, so that one phase builds on another, with the common overall objective of designing and testing (Creswell, Klassen, Plano Clark & Smith, 2011)

4.4. Design for this study

Given the array of mixed method research design, a sequential exploratory mixed method design was deemed most appropriate as the qualitative exploration has the potential to offer rich information which informs the qualitative follow up. Furthermore, this is the most popular design in health science research, a field in which sport studies is located. Table 4.3 highlights the rationale behind the design and data collected in this study. The sequential exploratory mixed method approach was explained in the section above. The table below illustrates the design of the study, through the two phases. Phase 1 included digital games only, whereas Phase 2 comprised digital games, wikis and blogs.

Table 4.3: Rationale for data collection

Steps	Research Activity	Data Collected	Objective	Intended Outcome/ Rationale
Step 1	**Pre-Phase 1** **Pilot (January-June 2013)**	Qualitative (Focus group)	A BETA-version of the game was designed and developed.	To ensure that the digital game was working, as intended. To implement the findings of the pilot into the next phases.
	Phase 1 (June 2013-December 2013-Cohort 1)	**This phase consisted of a digital game intervention only.**		
Step 2	Data collection	Baseline survey (Quantitative)	Objective 1: Describe students' knowledgeability of their social interaction within the sport studies classroom.	This data was gathered to assess students' status of use of emerging technologies. More specifically, with regard to the theoretical underpinnings of this study, the data was collected to explore their level of *interaction* and cross-cultural student engagement in the classroom.

Step 3	Data Collection	Qualitative 2 x focus groups	Objective 2: Establish how cross-cultural interactions are produced and reproduced in a sport studies classroom.	This data was collected to explore students' experiences playing a game across cultures and to interrogate issues pertaining to cross-cultural engagement. At a theoretical level, classroom habits (*interactions*) prior to and post-implementation is explored to determine whether a digital game may have transformed social norms and realities (*structure*).
Step 4	Data Collection	Post-intervention survey (Quantitative)	Objective 3: Determine how the processes of cross-cultural interaction recursively impacts on the reproduction of dominant norms in the sport studies classroom.	The data was collected and compared with the baseline data to determine whether there was a difference in engagement scores following the intervention. At a theoretical level, this data was collected to evaluate whether the *structures* relating to the production and reproduction of actions and interactions has changed over a period after a digital game intervention.
	Phase 2 (June 2014-December 2014-Cohort 2)	**This phase consisted of digital games, wiki's and blogs as the intervention. This was done for control purposes to compare whether games on its own yields better cross-cultural student engagement score or whether the addition of other emerging technology tools (variables) are comparatively greater.**		
Step 5	Data collection	Baseline survey (Quantitative)	Objective 1: Describe students' knowledgeability of their social interaction within the sport studies classroom.	This data was collected in order to determine whether the cohort from Phase 1 is similar to their 2014 counterparts. This data was also collected to explore their level of *interaction* and cross-cultural student engagement in the classroom.
Step 6	Data Collection	3 x focus groups (Qualitative)	Objective 4: Describe the role of emerging technologies to enhance cross-cultural student engagement through game based learning.	This data was collected to examine whether the use of a digital game fostered cross-cultural student engagement. Theoretically, classroom habits (*interactions*) prior to and post-implementation is explored to determine whether a digital game may have transformed social norms and realities (*structure*). The data was also collected to explore whether authentic learning can be mediated through the use of a wiki task to improve social interaction by agents.
Step 7	Post-intervention	Post-intervention survey (Quantitative)	Objective 5: Establish how digital games influence repetitive actions and interactions of cross-cultural engagement over a period.	Data was collected to gather information about engagement and cross-cultural interaction, as well as whether it had changed because of a digital game, wiki and blog. Determine whether games on its own can mediate cross-cultural engagement, or whether if it is augmented with

				other technologies, there is a greater chance of cross-cultural engagement.
Step 8	Blog	Reflective blog posts (Qualitative)	Objective 6: Identify interactions needed to experience cultural engagement in an authentic manner.	This data was collected during this stage provided insight into student reflections on learning with emerging technologies. The blogger space was created to document reflective practices of students and the effectiveness of an authentically designed wiki task to improve cross-cultural collaboration and engagement.

4.4.1. Overall course design/Learning context.

In the 2013 cohort, there were 94 students enrolled in a sport studies module at a higher education institution in the Western Cape, South Africa. The number students from the 2014 cohort enrolled in the module was 77 for the 2014 academic year.

The course consisted of 14 weeks of instruction and tutorial assistance, in which the game was played, as well. Each term comprised seven weeks each, split by a mid-term break. In both terms, students received a 1-hour lecture and a 1-hour tutorial on content, related to sport psychology. During this time, the game-based learning interventions for both phases were also conducted.

At the end of the semester, students were assessed by a final examination that contributed 40% of their final mark. The other 60% comprised their coursework marks, obtained throughout the 14 weeks. This module is compulsory for all second-year sport science students, registered for a degree in Sport Science. Many of the students had a sports background, having displayed academic competency, in order to access the programme. They hail from across the country and diverse historical backgrounds.

For the purposes of this study, the interventions for Phase 1 and Phase 2 took place in the second semester (Term 3 and Term 4); over a period of two academic years, with two separate cohorts. Like many other modules in this programme, it was originally presented in a didactic manner. In term 3, students from Phase 1 attended lectures and started constructing their first piece of an authentic paper-based assessment. The task required students to interview a classmate, who was also a sports-person, and develop a psychological profile of the individual. Based on the nine elements of authentic learning,

this task offered a context that was similar to the real world, and represented an activity that a sport psychologist would encounter in the real world. In the Phase 2, the same authentic task was completed on an online wiki platform. Assistance and support was offered in the tutorial, as well as consultation times allotted for this class. Introduction to the game was given in the fourth lecture, as well as a tutorial of the module, so that students could familiarise themselves with the gaming application. Students were taught some content and given some orientation about the subject. Baseline data were collected via a survey during the first introductory lecture. During week 4, the digital game was played in random groups, during the lecture period. During week 8, Phase 1 focus groups were conducted with students who volunteered to participate. In week 13 the post-intervention survey instrument was administered. In total, 10 sport psychology topics were covered in the course. These topics/contents were included in the digital game, which was made available from the fourth week of lectures, as well as in the tutorial periods. The use of the digital game spanned across the entire semester (6 months) for each phase (see Table 4.4).

Table 4.4: Class and Research Schedule

Phase One (2013)	Phase Two (2014)
Week 1: Introduction to the course Lecture	**Week 1**: Introduction to the course and Wiki Assignment
Week 2: Lecture and tutorials	**Week 2**: Lecture. Wiki orientation
Week 3: Lecture and tutorials	**Week 3**: Lecture
Week 4: Introduction of game and lecture	**Week 4**: Introduction of game and lecture
Week 5: Lecture, tutorials and game	**Week 5**: Lecture and game
Week 6: Lecture	**Week 6**: Test 1
Week 7: Test 1.	**Week 7**: First blog entry due.
Week 8: Lecture and game. [Phase 1 focus group interviews and transcription of interviews]	**Week 8**: Lecture and [Phase 2 focus group interviews and transcription of interviews]
Week 9: Lecture and game [transcribe and analyse interviews]	**Week 9**: Lecture and Game [Transcribe and analyse interviews]
Week 10: Test 2 [Design questionnaires. Give back to focus groups to evaluate clarity of questions]	**Week 10**: Test 3. Submit wiki [Design questionnaires. Give back to focus groups to evaluate clarity of questions]
Week 11: Lecture and game	**Week 11**: Lecture and Game
Week 12: Lecture and game	**Week 12**: Analyse pilot data
Week 13: Survey Instrument Data Collection	**Week 13**: Test 3
Week 14: Test 3	**Week 14**: Lecture. [Survey Instrument Data Collection. Extract reflective blog posts]

4.4.2. Profile of Participants

Participants in this study were sport studies students in their second year of study from a University in the Western Cape Province, South Africa. This second year group was selected not only for convenience, but also because it comprised students from both the Natural Science and Social Science disciplines. Established in 1959, the university was an ethnic institution for people classified as 'Coloured[2]'. The university was recognised as the 'intellectual home of the left', as it was part of the liberation movement and struggle against oppression, discrimination and disadvantage (University of the Western Cape [UWC], 2016). Known for its 'open' admissions policy, it provided access to African students, which paved the way for rapid growth. Some 50 years later, the academic identity of the institution reflects traces of the multiple identities evident in its historical narrative (UWC, 2016). All students, who participated in this research, were studying towards a degree in sport studies, which includes the study of sport, exercise, leisure and recreation at their core, including biophysical and socio-cultural approaches (Magadalinski, 2013). Students from the 2013 and 2014 cohort were invited to participate in this study. Table 4.5 presents the demographic information with regard to the participants in this study.

[2] The term 'Coloured' refers to individuals from a mixed race ethnicity. Coloured, formerly Cape Coloured, is a person from mixed (White and African) or Asian descent, as officially defined by the South African government from 1950 to 1991.

Table 4.5: Demographic information of participants

Demographic variable	Phase 1 (n=64)		Phase 2 (n=42)	
	N	%	N	%
Gender				
Male	43	67.2	21	50
Female	17	26.6	20	47.6
	*4	6.2	*1	2.4
Year of Study[3]				
First	-	-	1	2.4
Second	60	93.7	38	90.4
Third	1	1.6	1	2.4
Did not disclose	*3	4.7	*2	4.8
Degree				
B.A (SRES)[4]	33	51.5	26	61.9
B.Sc (SES)[5]	28	43.8	14	33.3
	*3	4.7	*2	4.8
Ethnicity				
African	4	6.3	9	21.4
Asian	-	-	2	4.8
Coloured	39	60.9	13	30.9
Indian	3	4.7	7	16.7
White	10	15.6	10	23.8
Other	1	1.6	-	-
	*7	10.9	*1	2.4

* *Participants did not disclose information*

Table 4.5 shows that in both phases there were more males than females in the classroom. The majority of the students were in their second year of study. Therefore, 60/64 (93.8%) of participants in Phase 1 and 38/42 (90.4%) of participants in Phase 2 were bona fide second year students. The other participants in the course may come from a different year of study. There are slightly more B.A (SRES) participants in Phase 1 and Phase 2 of this study, with 33/64 (51.5%) and 26/42 (63.9%) for each respective cohort. The majority of the participants in Phase 1 and Phase 2 identified themselves as 'Coloured'

[3] Repeating first year students are allowed to take this module in advance, whilst a third year student may have failed the module, but still allowed to carry it into the third year.

[4] B.A (Sport, Recreation and Exercise Science) degree represents a sport studies degree with additional majors in social science, such as psychology, history, English, economic and management studies.

[5] B.Sc (Sport and Exercise Science) degree comprises of sport studies and science majors.

ethnicity with 39/64 (60.9%) and 13/42 (30.9%) respectively. This is reflective of the historical legacy of the institution under study.

4.4.3. Sampling

Creswell (2006) suggests that to address a research question or hypothesis, the researcher must decide which people and research sites could provide the information, put a sampling procedure in place and determine the number of individuals that will be needed to provide the data. The different approaches to sampling are described in the following sections.

4.4.3.1. Quantitative Sampling

The quantitative sampling procedures were the same for 2013 and 2014 cohorts of students. This study was limited to second year students at a University in the Western Cape. The population for this quantitative segment included all the students registered for the module and the sample for data collection was selected using non-probability sampling, in the form of convenient sampling.

4.4.3.2. Qualitative Sampling

For the qualitative data collection segment, a form of non-probability sampling was utilised. A purposive sampling method was used to identify the prospective participants. The entire student population was invited to participate in the focus group discussions. All those who volunteered to participate in the focus group were selected for participation. Participants were placed in groups of eight as six to eight individuals is an optimal number for focus group discussions. Thus, students from the 2013 cohort participated in two focus group discussions regarding the experiences of using games, as well as its relation to student engagement and collaboration, four weeks after they had first engaged with the game. The 16 focus group participants were invited (verbally and electronically) to participate in this study.

In 2014, all students were invited to participate in each of the three focus group discussions which consisted of 8 participants in each group. The same sampling procedure as the 2013 cohort was used. An additional focus group was conducted, as the researcher sensed that theoretical saturation (Ritchie, Lewis & Elam, 2003)

was not achieved after the first two focused groups were completed and analysed. The researcher sensed that, after listening to the interview recordings, more information could be elicited from research participants, as too many constructs that had not been probed. Therefore, an additional focus group was conducted to elucidate more information from participants regarding their experiences of using emerging technologies in the classroom. Additionally, the students, who participated in Phase 2, submitted 500-word reflective blog posts about their experiences of engaging in digital games, wikis and blogs. Fifty-eight (58) entries were made on the blog, with one student submitting an electronic Word file, due to accessibility challenges.

4.5. Research Setting

The research setting for the quantitative and qualitative segments differ. For the qualitative segment, Patton (1990) suggests that qualitative researchers use a naturalistic approach to understand human experiences inductively and holistically, in terms of context-specific settings. Guba and Lincoln (1994) assert that the researcher is able to learn more through a naturalistic method of data collection. In this study, the setting being researched is the sport studies classroom, with students in their second year of a three-year programme, at a higher education institution in the Western Cape of South Africa. Second year students were conveniently selected, as they were entering into their senior year, the following semester. In addition, the modules comprised two streams of students, who represented the Natural Sciences and the Social Sciences. This allowed for a holistic perspective of all students enrolled in sport studies.

According to Creswell (2014) a data collection setting should be both convenient for the participants and guarantee them privacy and confidentiality. In this study, the most ‘appropriate’ and ‘natural’ setting for collecting data was in the classroom since it was familiar to most of the students. This was the setting where the digital game was played. However, for the focus group discussions, a central venue, which was conveniently situated for all students, was used. This venue was located in their home department, where the participants felt most comfortable. These focus group discussions were conducted during Phase 1 and 2, four weeks after they had started to play the game. However, the participants continued to play the game throughout the module. The post-intervention survey was conducted during the penultimate lecture of the year, as the last week was used to revise and prepare for assessments. This was

also the last week that the game was played and, therefore, the participants were better able to reflect on their experiences of the gaming intervention. Therefore, there was a short break between engaging with the tools and the collection of data, which allowed for better recall. All data were collected at the end of the semester, to determine the full effect of the implementation of the game.

To ensure the validity of the study, as the course convener, the researcher did not collect any of the data. All data (survey and focus group data) were collected by research assistants. This strategy was confirmed by the research ethics committee. This was done so as not to intimidate the students by the presence of the researcher, who was also the lecturer assessing the module. Therefore, the research setting also guaranteed the necessary privacy and confidentiality. Focus groups were also run in a location on the university campus chosen by the research assistant in agreement with the research participants. The course content was integrated with the research schedule demonstrated in Table 4.4.

4.6. Data Collection

Qualitative data-collection methods such as interviews, are useful because they allow the participants to express themselves in their own words (Flick, 2002). This provides them with an opportunity to have their voices heard and to offer personal views on interpretations, experiences and opinions. Qualitative research methods seek to ascertain the underlying fundamental nature of the participants' experiences and ultimately to inform the conclusions of any research (Creswell, 2009).

A pilot study (Qualitative focus group was conducted prior to the implementation of Phase 1, which consisted of only a game based intervention. All data was collected in the following order:

1) A pre-intervention baseline survey (Quantitative);
2) Two focus group interviews (Qualitative); and
3) A post-intervention survey (Quantitative).

Data collection in Phase 2 augmented the study with an authentic wiki based task and a blog in addition to the gaming interface. The data were collected in the following order:

1) A pre-intervention baseline survey (Quantitative);
2) Three focus group interviews (Qualitative);
3) A post-intervention survey (Quantitative); and
4) Fifty-eight 500-word blog posts (Qualitative).

4.6.1. Research Instrument: Digital Game

The game was designed as a quiz game, which would also be easily applicable to other subjects of a similar nature. In this case, students would learn the content by collaboratively playing the game. The game was designed for groups of between three and five players on each team to participate/play.

Figure 4.1: Screenshots of game login and registration

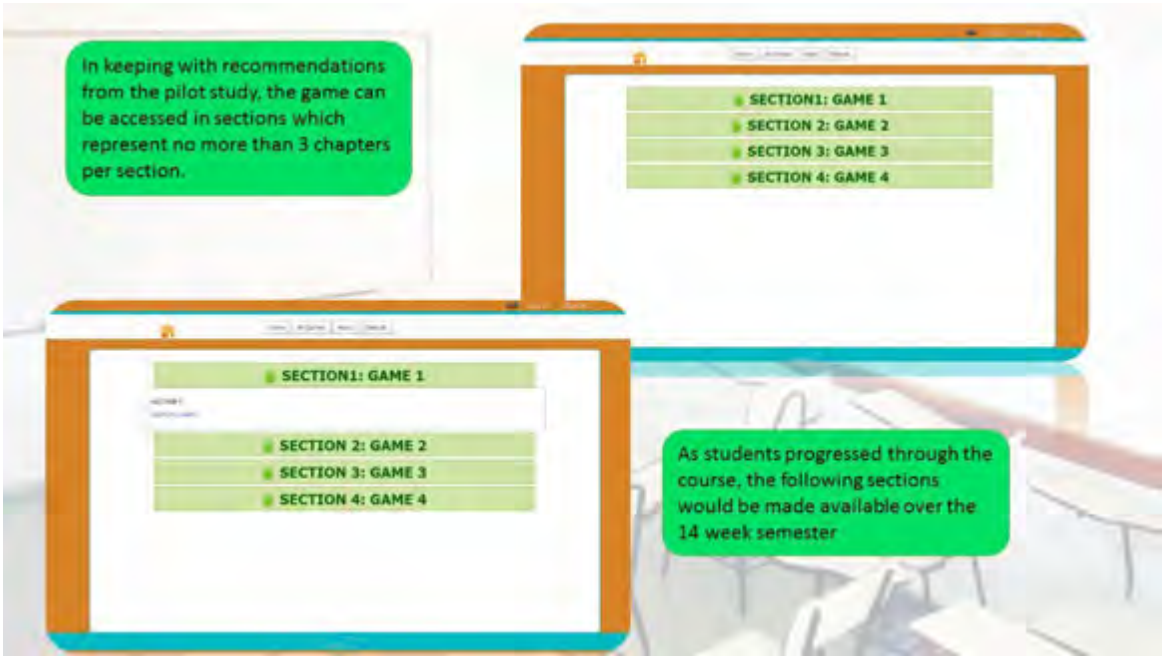


Figure 4.2: Screenshots of landing pages of quiz game.

The game can be played on a laptop, or a mobile device, such as an iPad or tablet, or a smartphone. The game requires teams to answer as many questions correctly as possible within 45 seconds.

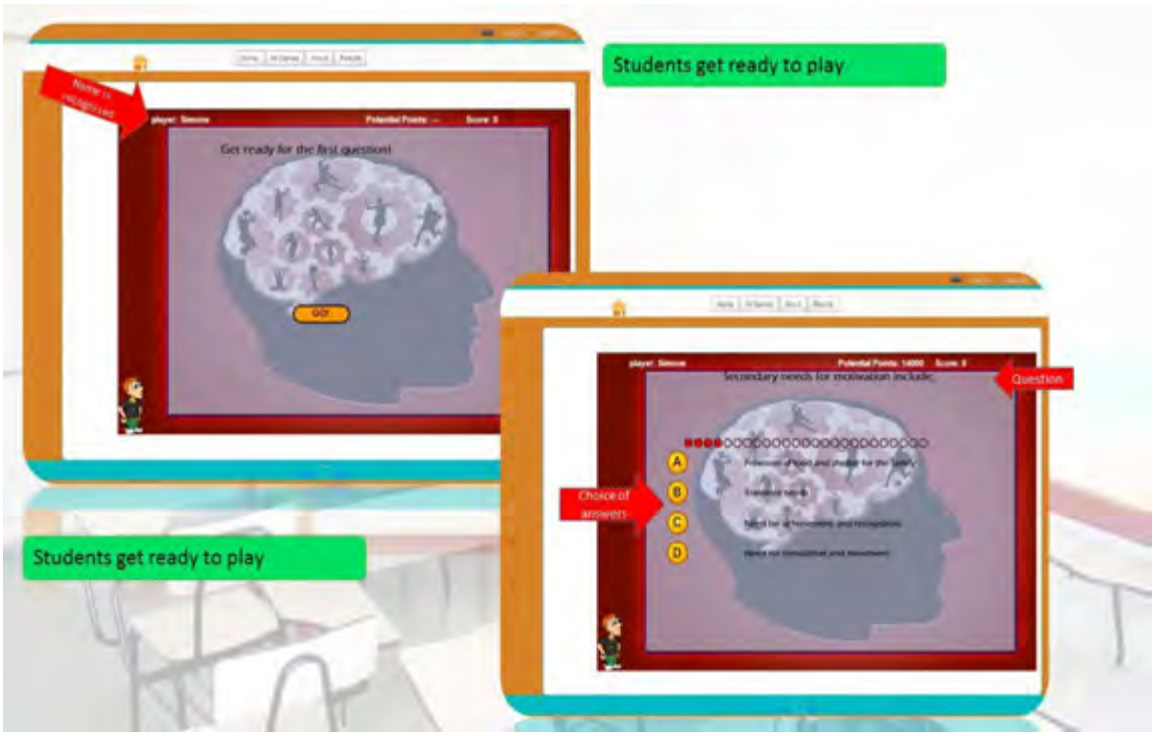


Figure 4.3: Screenshots of types of questions

For each game round, there should be a leader in the group, who controls the game and reads the questions. His/her group members assist in answering the questions. Groups that answer the most questions correctly score the highest points. Each gaming session lasts for approximately 7 minutes, after which a new leader is selected, until each member has had a leadership opportunity. Although this did not always happen, a concerted effort was made to ensure that each person had a leadership opportunity in the various iterations. There are no penalties in the game, however, failure to answer questions correctly, resulted in failure to move forward in the game, or accrue more points. Each week, the score is saved as a built in feature on the game. The leader board or log sheet is displayed on the game interface.

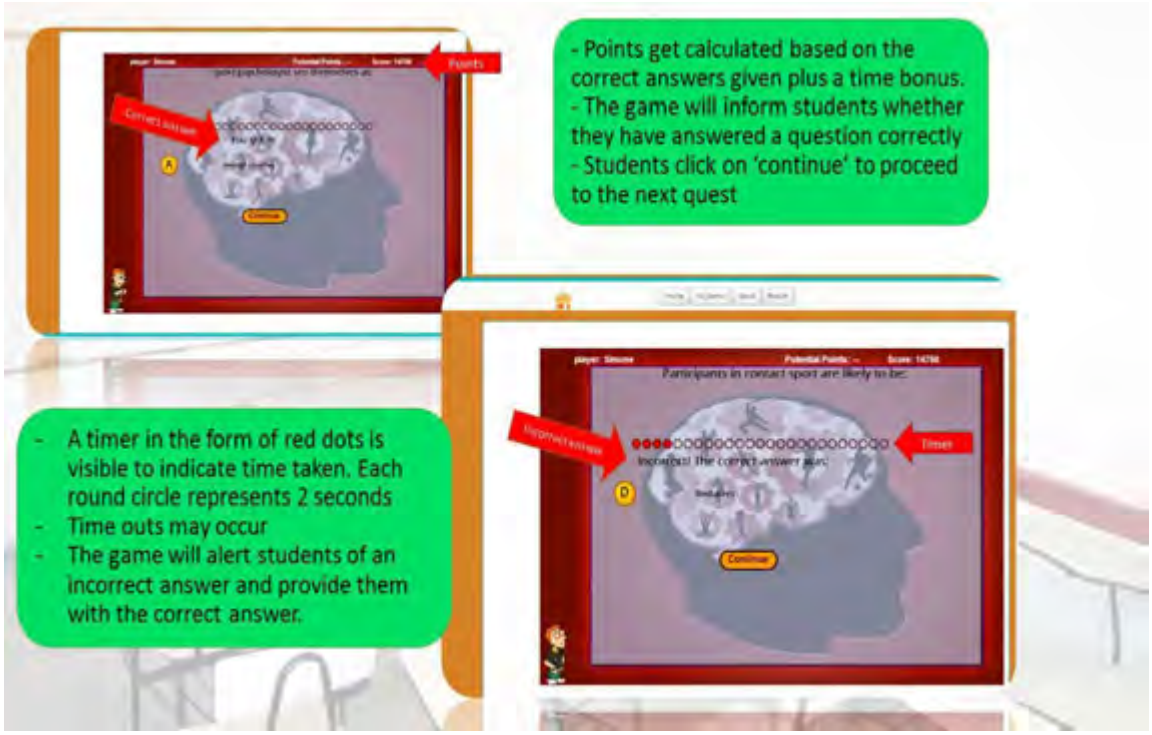


Figure 4.4: Screenshots of timed questions

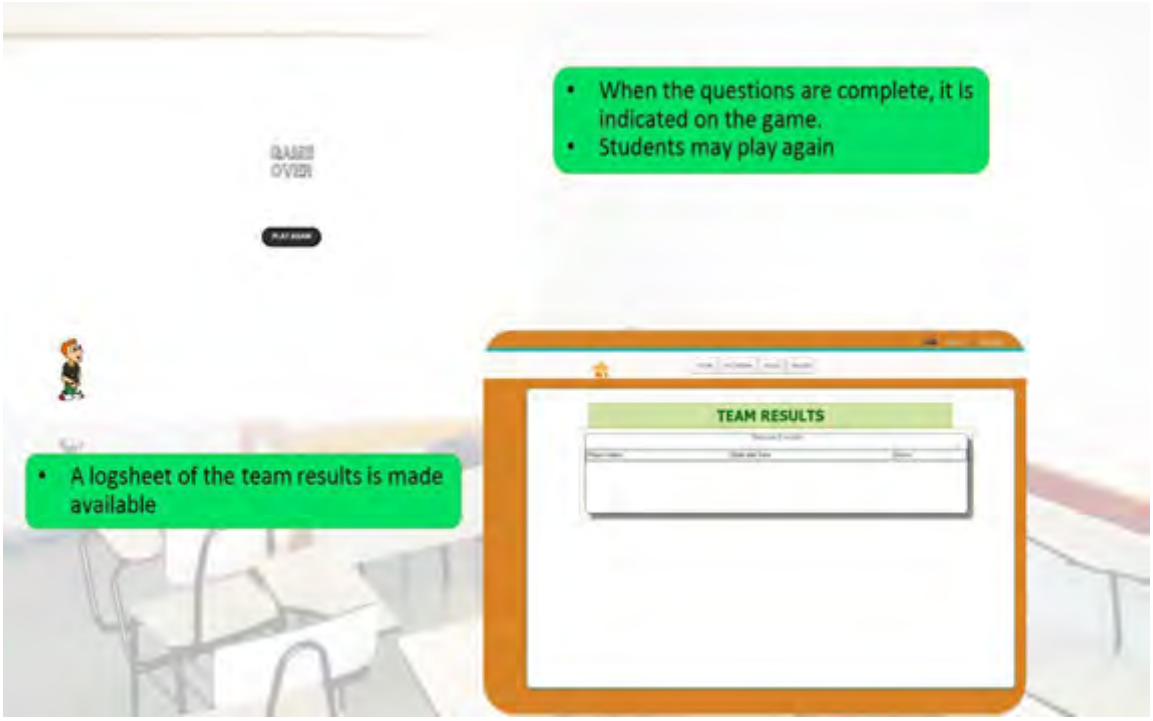


Figure 4.5: Screenshot of end of game and team results log

Students could also access the game at home, using no login details. This was done to prepare for tests, as well as exams. All the login details were erased before the group gaming sessions.

4.6.2. Game based intervention

After the baseline data were collected, students were randomly placed into groups. Randomisation of groups was done on Microsoft Excel 2010, using the =*Rand()* formula. This allowed the class list to be randomised without any manipulation. From the random list generated by Microsoft Excel, students were placed into groups of 5. After each group was assigned a login and password, they played against each other for the duration of the class.

In line with research objective number IV (See Section 1.5), randomising the class list allowed cross-cultural student interactions in the classroom. Structuration theory proposes that routines persist in society, thereby reinforcing dominant social practices. Routine interactions, therefore, become institutionalised characteristics of the social system, through custom, or habit, and do not stem from coincidence, but from the psychological lining of knowledgeable agents (Stones, 2005; Giddens, 1984).

Randomisation in this study was deliberately employed in order to disrupt the social practices of clustering in cultural groups. As a result, participants in this study were meeting peers, with whom they would not ordinarily interact with on a regular basis. This was intentionally done to exploit the rich diversity of the classroom, by facilitating a space that would allow for an exploration of interactions needed to experience cross-cultural engagement. Thereafter, the game intervention was conducted in four iterations. These iterations were done for various reasons, including continuous development of the game prototype. These iterations are described below.

Iteration 1: The first iteration was conducted four weeks after the first class. Game 1 included multiple choice questions from chapters 1-3 of the prescribed course reader by Potgieter (2013). The primary aim of this iteration was a socialisation exercise. Since many of the students did not know fellow classmates in their group, the iteration with the game as a group, allowed them to get to know one another. The secondary aim of this iteration was to engage with the content of chapters 1-3 of the prescribed course reader, through collaborative learning, while playing the game in a group. All scores were logged into the leader board on the game interface. Twenty percent of the first piece of formative assessment comprised questions taken directly from the quiz question bank embedded in the digital game.

Iteration 2: In line with the research design of developing and redesigning a prototype, iteration two included a new section of the game. Game 2 consisted of multiple choice questions from chapters 4-6 of the prescribed course reader by Potgieter (2013). This game was played 4 weeks after Game 1. The structure of the game was similar to Game 1, but comprised new content, as the content of Game 1 was assessed in Week 4. Therefore, the time it took to present lectures on new content coincided with the presentation of Game 2. Game 2 consisted of different content, embedded in the gaming application. Similarly, so did Game 3 and Game 4. The primary aim of this iteration was to allow students an opportunity to engage with the content and collaboratively construct knowledge, since they were more familiar with their teammates, and felt more comfortable in their randomly assigned groups. In addition, the students could access the game from anywhere, even in their homes at their own leisure, as a revision tool. This did not affect the research design, as the objective was to explore the production and reproduction of cross-cultural interactions in the classroom critically, which was

observed during allocated class times. An incentive voucher was made available for the group who landed at the top of the leader board. No multiple-choice questions from this iteration were used for the term test.

Iteration 3 and 4: The prototype of the game was continuously re-designed to add two more game levels. At the end of the 14 weeks, the game housed four sections that students could access. This was to allow for access to content and to engage with content through cross-cultural interaction. Game 3 was used to prepare for the last test, while Games 1-4 were used for the final examination. An incentive, in the form of a free health risk assessment at a registered bio kinetics practice on campus was offered to the leaders of Game 3.

4.6.3. Authentic Wiki Task

A wiki task was designed for a sport psychology module in accordance with authentic learning principles.

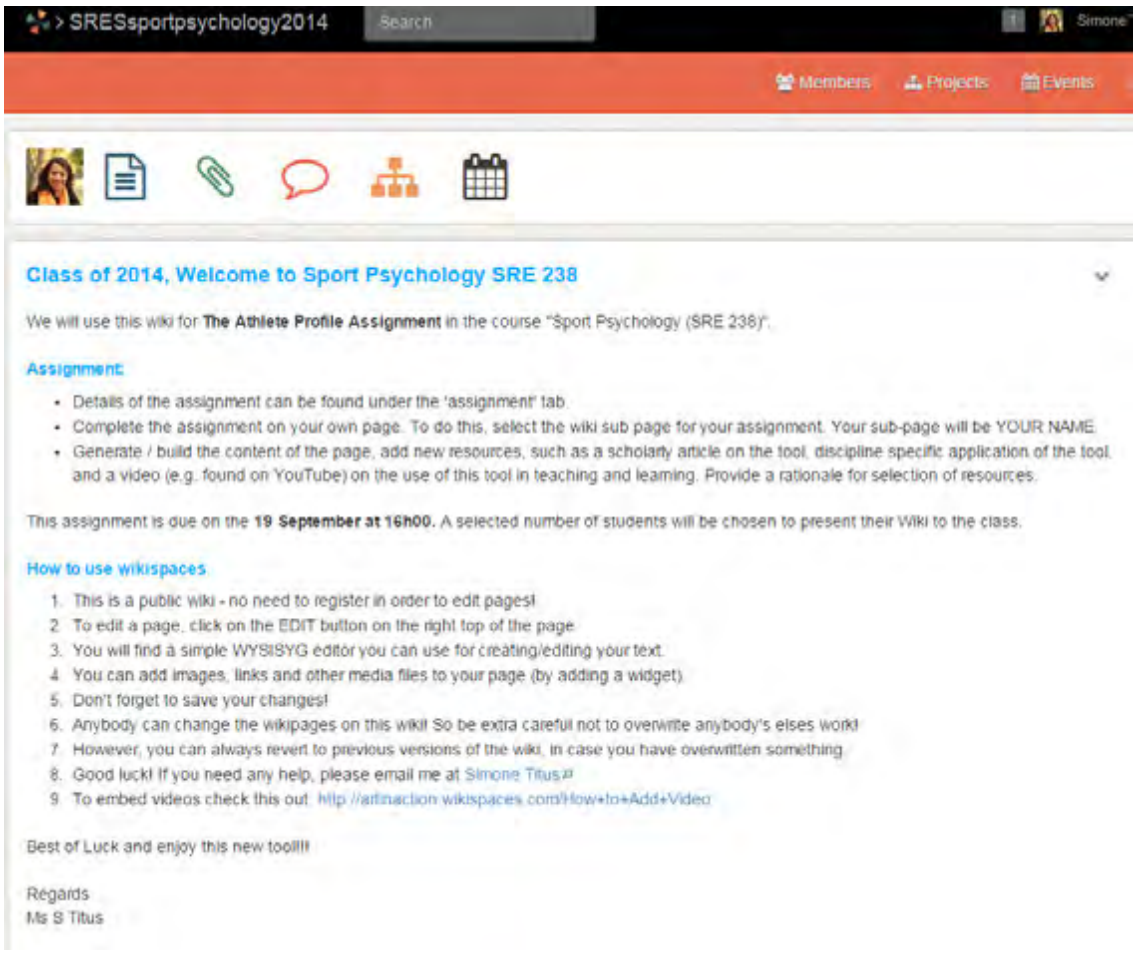


Figure 4.6: Screenshot of Wiki home-page

Authentic learning, as discussed in Chapter 2, has nine elements (see Section 2.5), all of which was adopted in the design of this task. The nine elements are;

1. Authentic Context
2. Authentic Activity
3. Expert Performance
4. Multiple Perspectives
5. Collaboration
6. Reflection
7. Articulation
8. Coaching and Scaffolding
9. Authentic Assessment

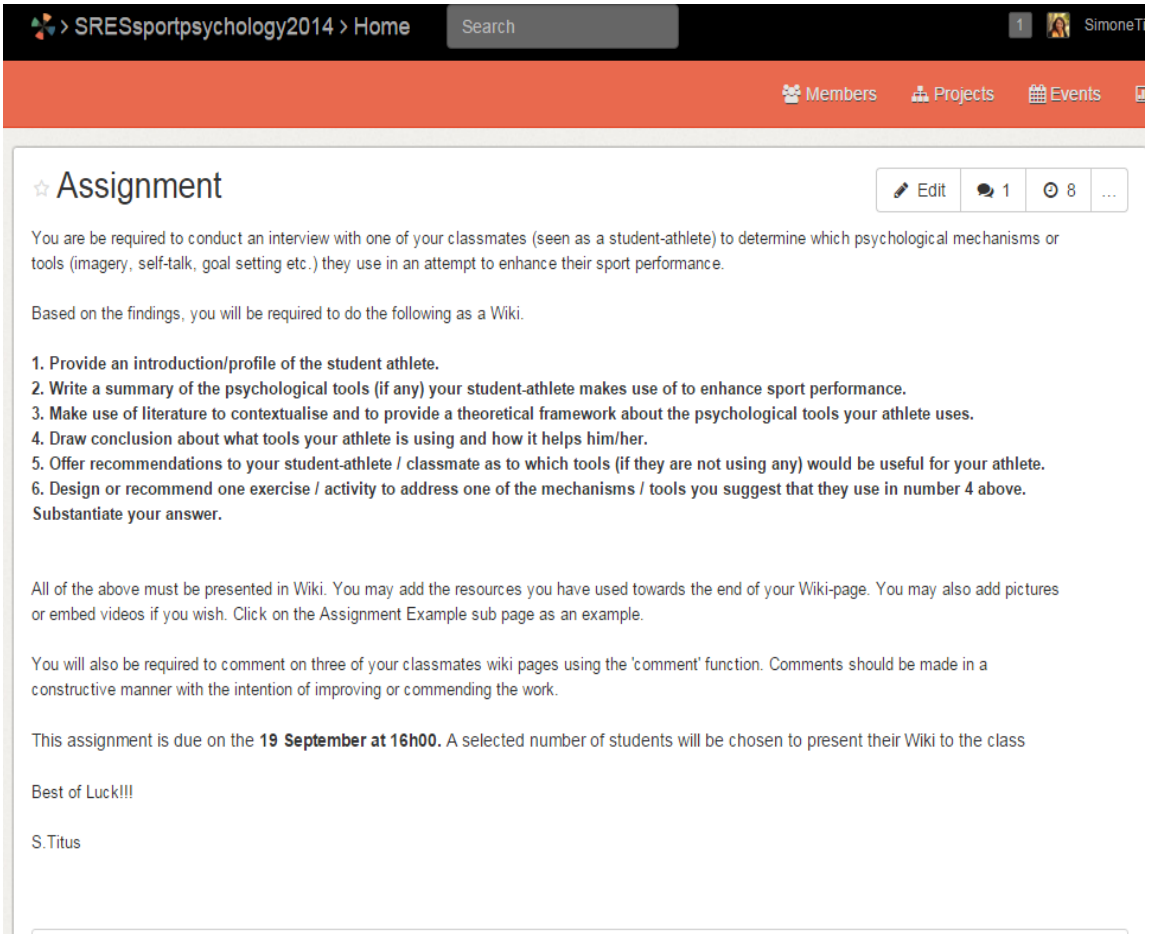


Figure 4.7: Screenshot of authentically designed wiki assignment

Students were required to complete the following tasks individually:

1) Interview a peer in their class, who was a student-athlete, to determine the psychological tools their peer would use, while participating in sport;
2) Find relevant literature to contextualise, or support, their findings, based on their interview; and
3) Based on their findings, they had to develop, or recommend, an activity to enhance sporting performance.

The student-athlete profile was constructed on a wiki using the Wikispaces application. While completing the wiki, three peers were required to offer feedback on a wiki, in order to improve the final product. The peers were randomly assigned to a wiki page, to provide feedback.

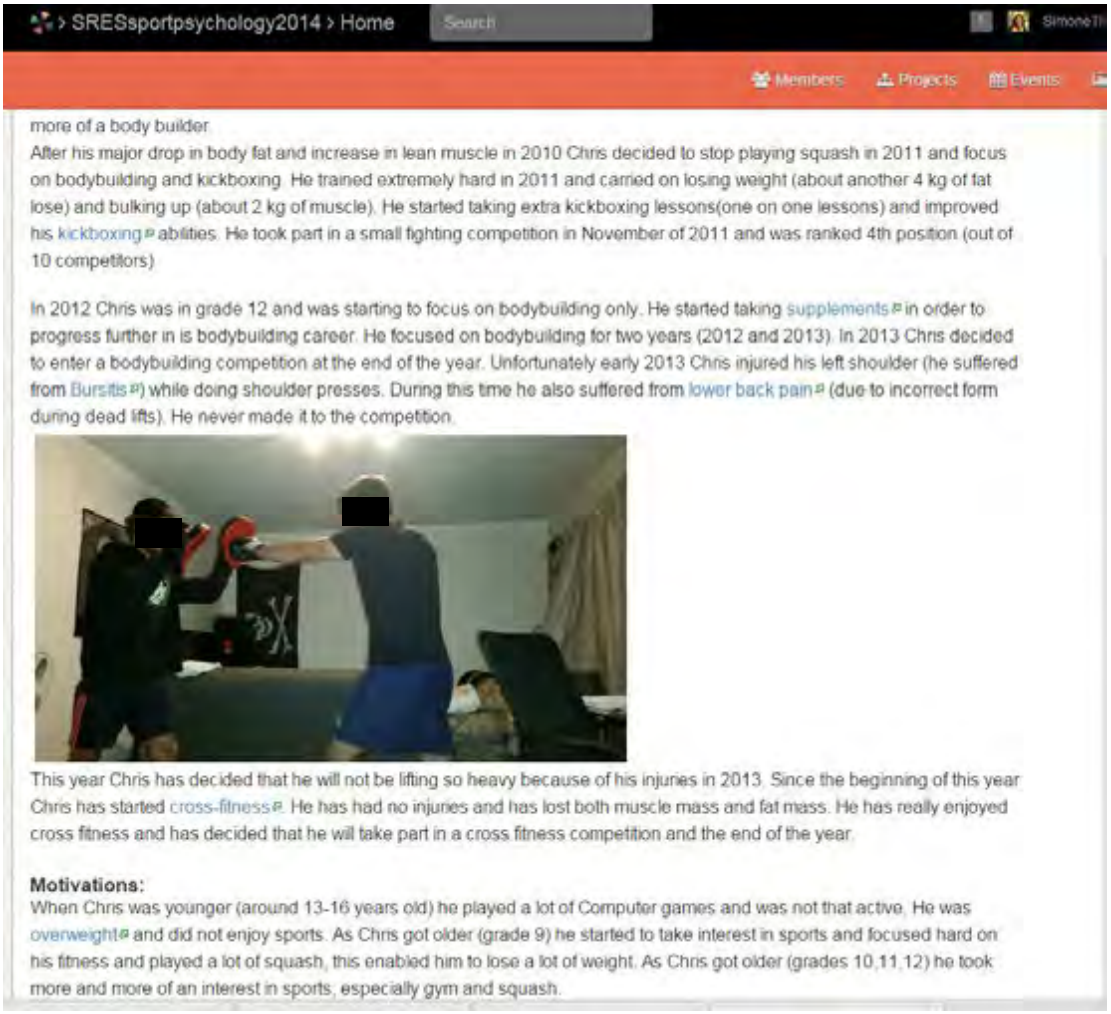
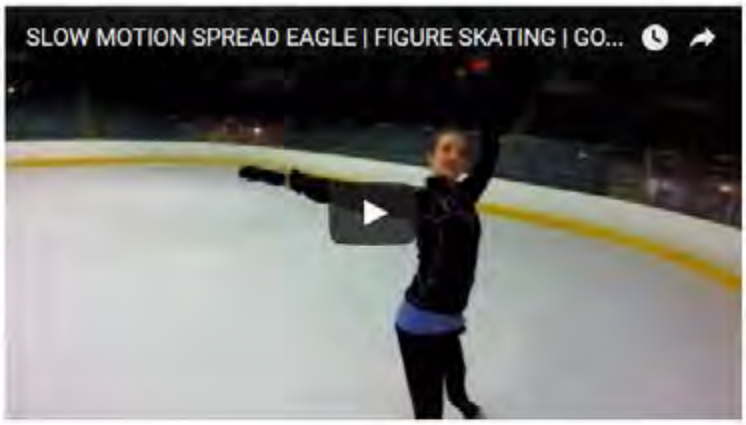


Figure 4.8: Screenshots of student's completed wiki (a)

Michaela uses upbeat music to get her feeling 'amped and excited' before a performance. She describes the effect of **music** on her performance as allowing her to be in the right frame of mind before performing, and the music serves as a **distraction** from others who burden her with their worries and apprehensiveness. She admits that, 'I get very nervous before I compete, but as soon as the music starts I am fine'. This has been confirmed in a study by Laukka and Quick (2013) where the researchers studied the emotional and motivational uses of music in sports. Some of the explanations for athletes listening to music prior to competition were to increase pre-event activation, motivation, performance levels and to experience flow (Laukka & Quick, 2013). Seeing that ice-skating is a musical performance, the effect of music is even more important. Being 'alert' was the most frequently mentioned state in the study using music to enhance performance and facilitated both cognitive and physiological arousal which was seen to have the most significant importance in musical sporting events (Laukka & Quick, 2013).

Simulation training has been described by Potgieter (2013) as a strategy that involves practising under conditions similar to competitive conditions. In Michaela's instance the dress rehearsal before a show or competition is helpful for her as she is able to rehearse in her costume with the music and routine that she will perform before the actual event. If the dress rehearsal goes well, her confidence is improved which prepares her for the real event.

Slogans as well as **self-talk** techniques are helpful to Michaela. She uses short phrases to focus on physical aspects of certain movements that she needs to concentrate on during execution, such as 'Knee out and shoulder back' when performing the spread eagle.



In terms of slogans, it was found that slogans that athletes chose for themselves were more effective than those slogans assigned to athletes by others (Hatzigeorgiadis, Zourbanos, Galanis & Theodorakis, 2011). Self-talk is most useful when new skills are being learnt as opposed to the performing of already acquired skills (Hatzigeorgiadis et al., 2011). As Michaela has not yet mastered the *spread eagle*, this technique is highly

Figure 4.9: Screenshot of a student's completed wiki (b*)*

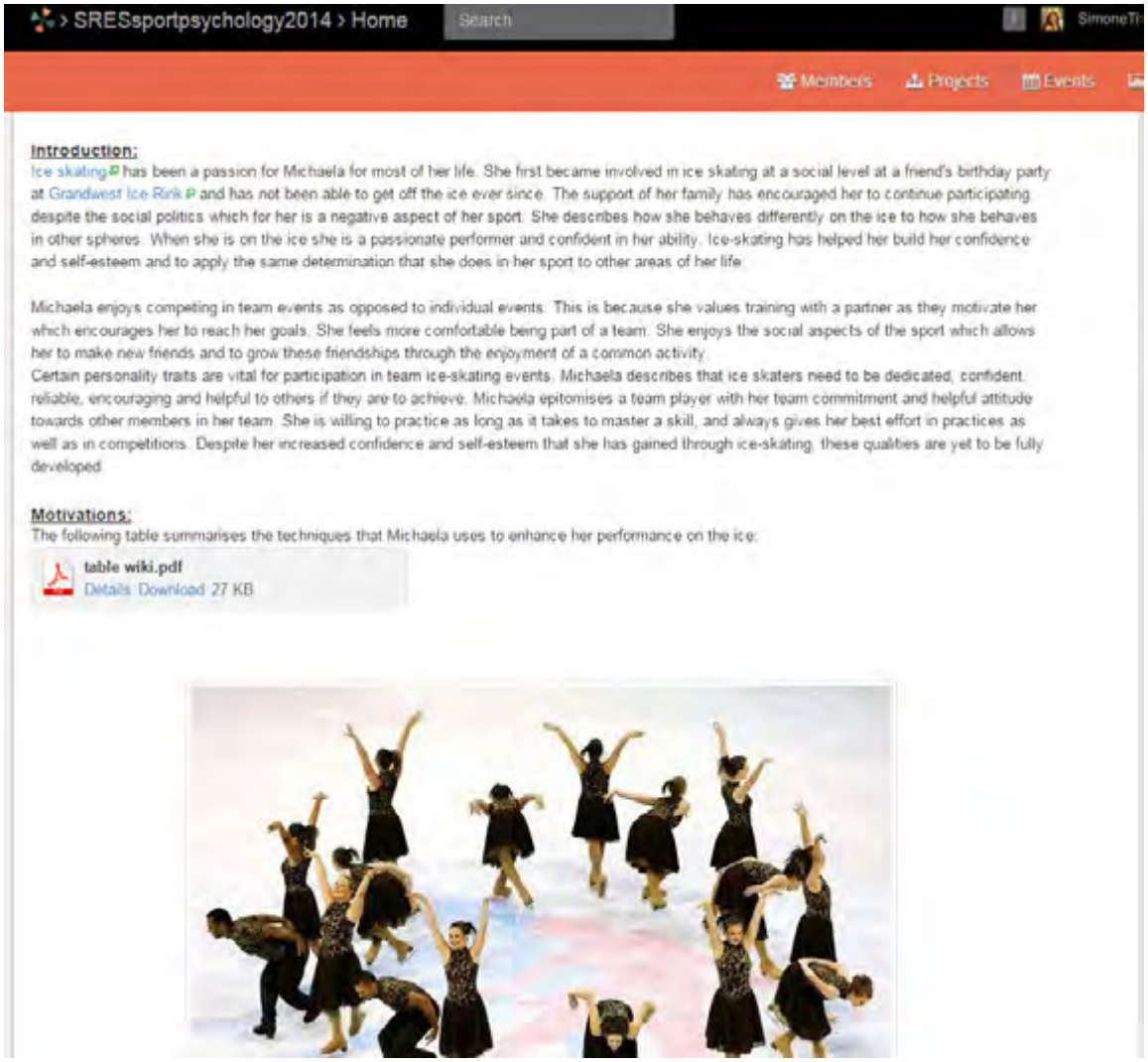


Figure 4.10: Screenshot of a student's completed wiki (c)

This was done for the purposes of improving each wiki page. After completion, each student's wiki page was anonymously peer reviewed by another class member. These were assigned by the researcher, who randomised the class list and allocated a name of a peer to each student using random numbers. Alongside the wiki, a class blog was available for use as a forum for discussion, related to topics covered in class, and as a reflective space on their learning experiences, using emerging technologies.

4.6.4. Blog Tool

The blogger tool was used as an additional platform in the classroom.

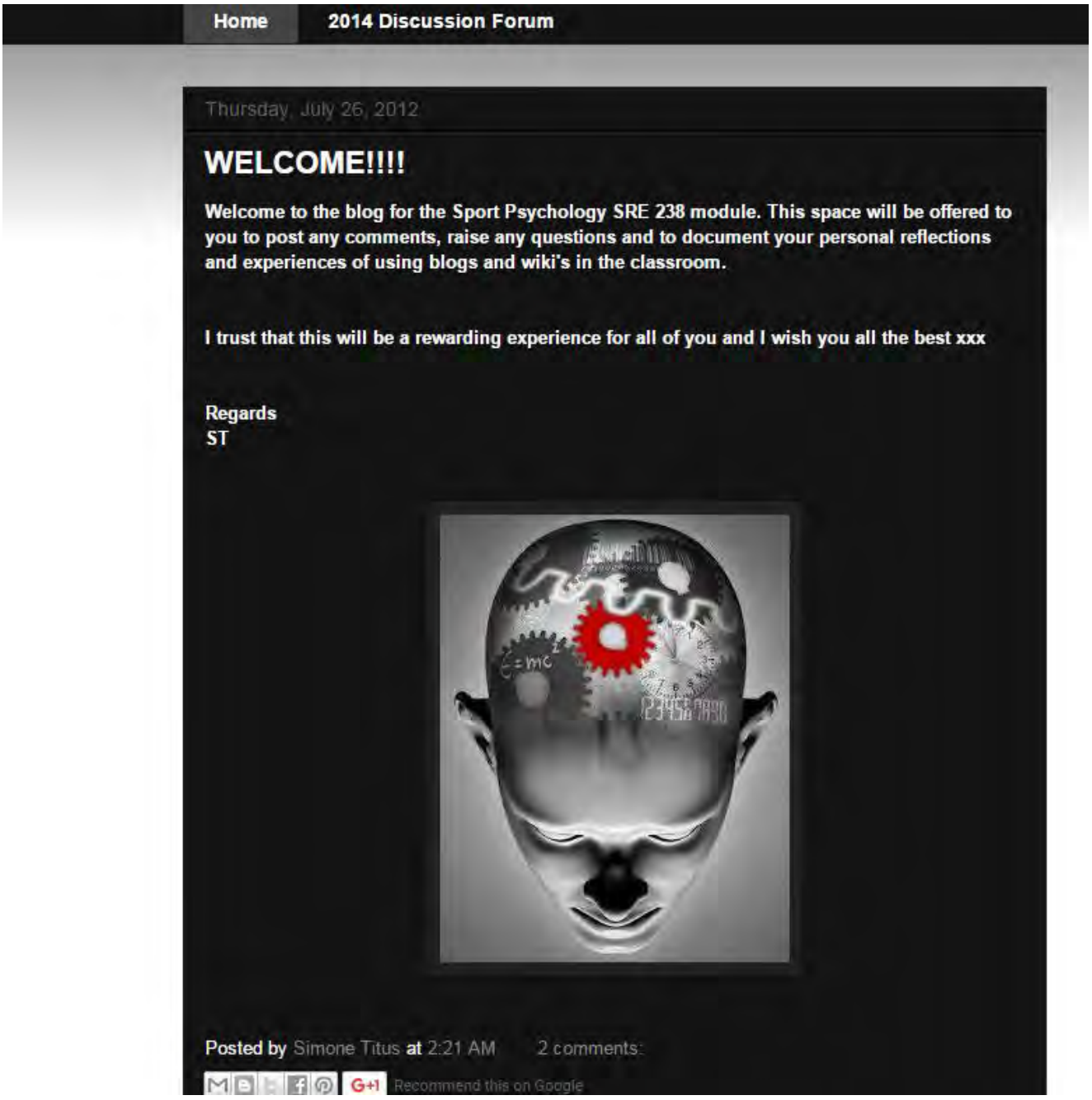


Figure 4.11: Screenshot of blog Welcome page

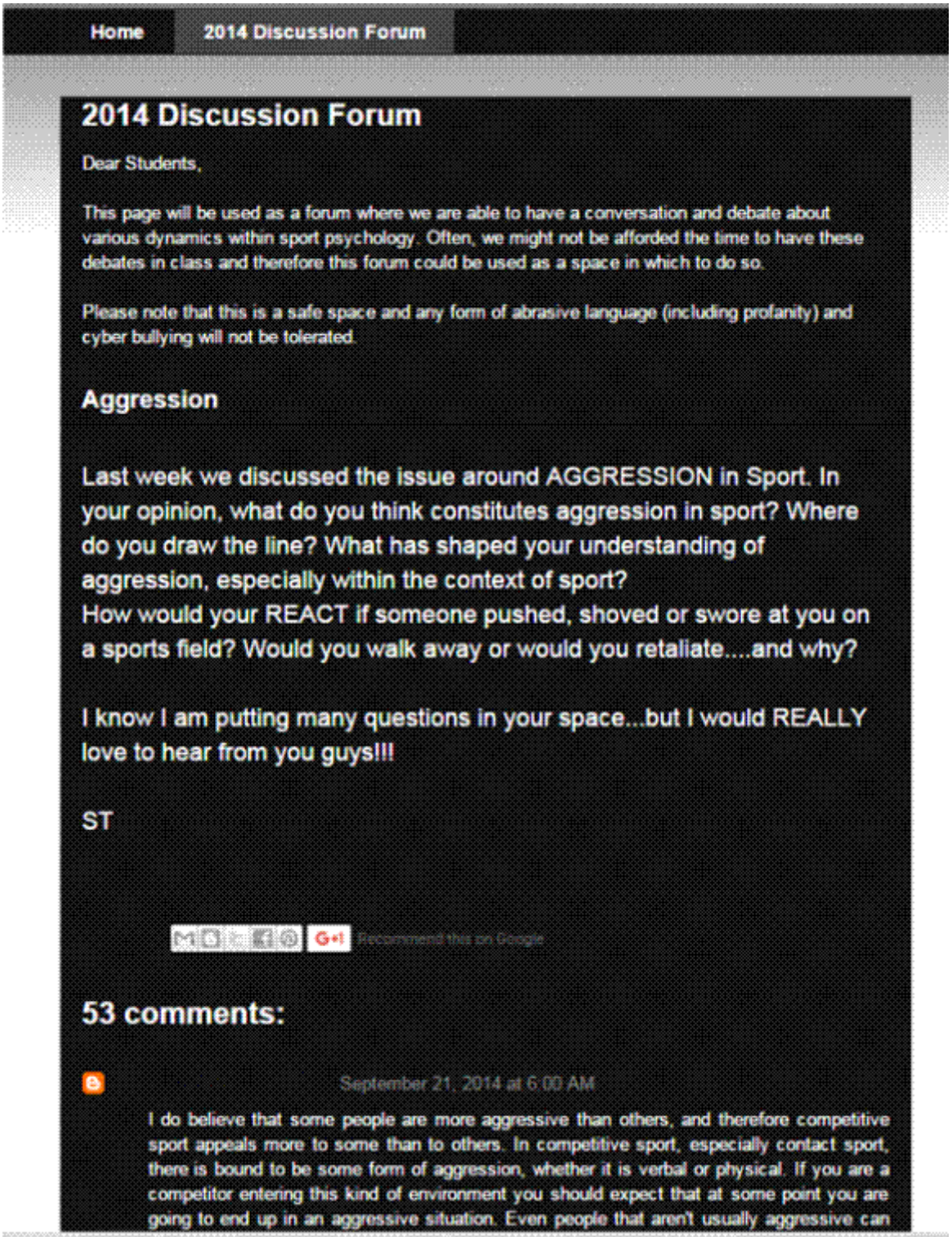
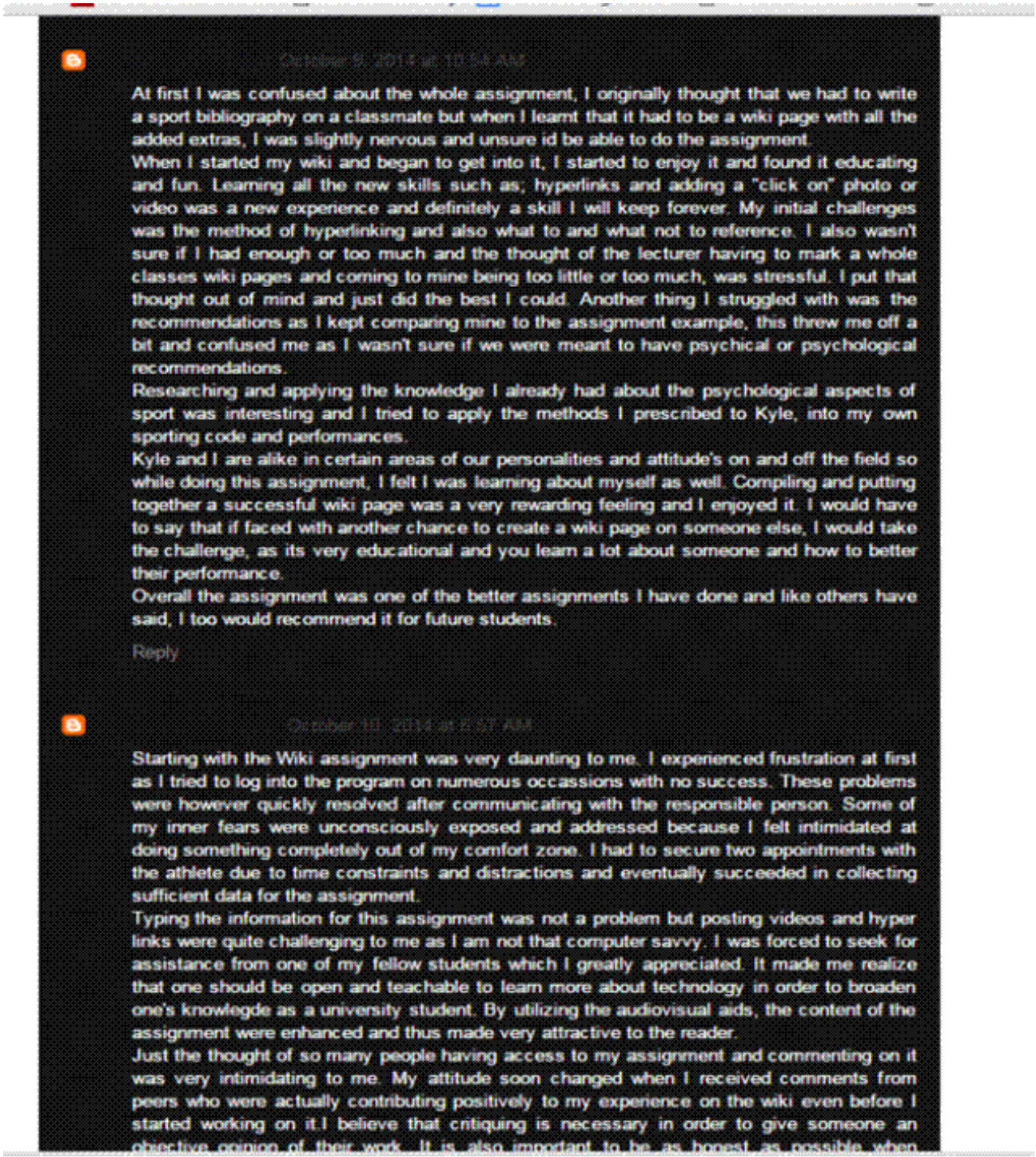


Figure 4.12: Screenshot of blog discussion page

Discussion forum pages were created and used for discussions of topics that were not completed in the classroom. This also allowed the researcher to determine areas, where students required further learning. Another purpose of the blog was for posting students' reflective experiences of engaging with the emerging technologies in the classroom.



At first I was confused about the whole assignment, I originally thought that we had to write a sport bibliography on a classmate but when I learnt that it had to be a wiki page with all the added extras, I was slightly nervous and unsure id be able to do the assignment.
When I started my wiki and began to get into it, I started to enjoy it and found it educating and fun. Learning all the new skills such as; hyperlinks and adding a "click on" photo or video was a new experience and definitely a skill I will keep forever. My initial challenges was the method of hyperlinking and also what to and what not to reference. I also wasn't sure if I had enough or too much and the thought of the lecturer having to mark a whole classes wiki pages and coming to mine being too little or too much, was stressful. I put that thought out of mind and just did the best I could. Another thing I struggled with was the recommendations as I kept comparing mine to the assignment example, this threw me off a bit and confused me as I wasn't sure if we were meant to have psychical or psychological recommendations.
Researching and applying the knowledge I already had about the psychological aspects of sport was interesting and I tried to apply the methods I prescribed to Kyle, into my own sporting code and performances.
Kyle and I are alike in certain areas of our personalities and attitude's on and off the field so while doing this assignment, I felt I was learning about myself as well. Compiling and putting together a successful wiki page was a very rewarding feeling and I enjoyed it. I would have to say that if faced with another chance to create a wiki page on someone else, I would take the challenge, as its very educational and you learn a lot about someone and how to better their performance.
Overall the assignment was one of the better assignments I have done and like others have said, I too would recommend it for future students.

Reply

Starting with the Wiki assignment was very daunting to me. I experienced frustration at first as I tried to log into the program on numerous occassions with no success. These problems were however quickly resolved after communicating with the responsible person. Some of my inner fears were unconsciously exposed and addressed because I felt intimidated at doing something completely out of my comfort zone. I had to secure two appointments with the athlete due to time constraints and distractions and eventually succeeded in collecting sufficient data for the assignment.
Typing the information for this assignment was not a problem but posting videos and hyper links were quite challenging to me as I am not that computer savvy. I was forced to seek for assistance from one of my fellow students which I greatly appreciated. It made me realize that one should be open and teachable to learn more about technology in order to broaden one's knowlegde as a university student. By utilizing the audiovisual aids, the content of the assignment were enhanced and thus made very attractive to the reader.
Just the thought of so many people having access to my assignment and commenting on it was very intimidating to me. My attitude soon changed when I received comments from peers who were actually contributing positively to my expenence on the wiki even before I started working on it.I believe that critiquing is necessary in order to give someone an objective opinion of their work. It is also important to be as honest as possible when

Figure 4.13: Screenshots of reflective summaries for the blog

Students were encouraged to contribute at least a five-hundred (500) word reflective summary about their experiences of using emerging technologies in the classroom. Fifty-seven students contributed reflective summaries of their experiences of gaming and using emerging technologies in the classroom. The hits on the blog for 2014 were 4169.

Figure 4.14: Number of visits on blog at the end of 2014 (Phase 2)

4.6.5. Data Collection for each phase.

The section below highlights the data collection strategy employed for each phase, in accordance with a sequential mixed method approach. Phase 1 only included the implementation of a digital game. Phase 2 comprised of the implementation of a digital game, a wiki and a blog. The data collected for each of the phases is presented in Table 4.6 below.

Table 4.6: Data Collection Sets for each Phase

Phase 1 (2013) **Semester 2: June-December 2013** **(Digital game intervention)**	**Phase 2 (2014)** **Semester 2: June-December 2014** **(Digital game, wiki and blog intervention)**
• Baseline survey • Two focus groups • Post-intervention survey	• Baseline survey • Three Focus Groups • Post-Intervention Survey • 57 Reflective blog posts

4.6.5.1. Quantitative data collection

During Phase 1 and Phase 2, two sets of quantitative data were collected. Students were briefed on the aims and objectives of the study. They were informed that participation was voluntary and that they were under no obligation to participate. Those, who gave consent to participate, were informed that they could withdraw at any stage without penalty. The pre-test survey (baseline data) was collected after

the first lecture by a research assistant. Sixty-Four (64) baseline surveys were completed by respondents in Phase 1 and forty-two (42) in Phase 2. Post-test surveys were administered by a research assistant, during the first and penultimate lectures, during each phase. This was done in order to avoid any researcher bias and to ensure validity. The data were collected from the students in the classroom where they received lectures. Consequently, 42 post-intervention surveys were completed by the respondents in Phase 1 and 43 in Phase 2. This time and venue was selected, as it was the most convenient place for data collection. The students were also given the option to return the survey at their own convenience. All surveys were coded for the purposes of matching the data. All ethical considerations and validity techniques were adhered to, as per the pre-test data collection.

4.6.5.2. Qualitative Data Collection

Kitzinger (2005) suggests that focus group discussions are organised to explore a specific set of issues such as people's views and experiences. The qualitative data for this study consisted of five focus group discussions, which were all conducted by research assistants. Phase 1 comprised two focus groups and Phase 2 comprised three. Data were collected by research assistants to ensure that validation measures were in place for this study. As the assessor and lecturer of the module, the researcher did not collect the data, to avoid any form of intimidation or apprehension that the students might entertain, which would impede process of sharing information. Therefore, neutral research assistants were sourced for this purpose.

During Phase 1, both focus groups were run by the same research assistant, who was briefed about the aims and objectives of this study. In Phase 2, a new research assistant was employed, due to the unavailability of the research assistant of Phase 1. Both research assistants were given training in the conducting of focus groups. A set of cue questions was given to the research assistants to guide the discussion.

All the students from both cohorts were invited to participate in the focus group discussions. Each focus group comprised eight participants. These participants volunteered to participate at a time that was convenient for all of them. A time and

suitable venue was arranged by the research assistants. Each group of participants was briefed about the study. They were informed of the aims and objectives of the study, as well as the procedures to be followed. They were also informed that their participation would be voluntary, and that they could withdraw at any time, without penalty. They were invited to sign a consent form (See Appendix G). All the focus groups were recorded by Dictaphone, after permission was received from the participants. All the recordings were transcribed, verbatim, into English (See Appendix I). Each focus group continued for 60-90 minutes. Data collection was conducted until theoretical saturation was reached, after the second focus group in Phase 1, as no new information was emerging; however, in Phase 2, the researcher believed that a third focus group was necessary. According to the researcher, too many constructs that could provide more rich data, had not been probed, sufficiently.

4.6.6. Data Collection Instruments

The information that follows describes the data collection instruments used to gather data for Phase 1 and Phase 2. These instruments comprised baseline surveys, post-intervention surveys, focus group guides and a reflective blog.

4.6.6.1. Baseline surveys for Phase 1 and Phase 2

The baseline survey for Phase 1 and Phase 2 were identical. The baseline survey was modified from various instruments that had already been tested in the South African Higher Education setting (Rowe, 2009; Strydom, Mentz & Kuh, 2010). The purpose of the baseline data was to explore students' experience with digital games and emerging technologies, their perceptions of cross-cultural interaction, and to examine their levels of engagement in a classroom (See Appendix A). The questions which related to student engagement were adapted from the Classroom Survey for Student Engagement (CLASSE)was validated by Strydom, Mentz and Kuh (2010). In addition, the literature informed the inclusion of scales and sub-scales related to the students' interaction in the classroom and their experience of playing digital games. For the purposes of reliability, a test to determine internal consistency of the scales and sub-scales of the baseline survey yielded a Cronbach Alpha of 0.8. This indicates strong reliability of the scales and subscales of the baseline survey.

The main purpose the instrument was to assess the student's current interactions with regard to cross-cultural engagement and cultural clustering, their knowledge and experience of using emerging technologies in the classroom, what tools they currently used to learn, how they learn (whether by themselves and from one another) and their perceptions of gaming. The data collected from the baseline surveys were used for control purposes. This was done to isolate variables, in order to understand, comprehensively, the relationship between them.

4.6.6.2. Focus Group Guides in Phase 1 and Phase 2

A set of cue questions were developed from literature on gamification, as well as some of the information obtained from the baseline study. This included questions on engagement and cross-cultural interaction. The focus group cue questions were developed to elucidate information with regard to students' cross-cultural interactions, experiences of gaming in the classroom, and their reasons for homogenous grouping (See Appendix E). In addition, the focus group questions were designed within the framework of Giddens' Structuration Theory. To supplement the questions for focus groups conducted during Phase 1, additional questions, regarding the use of emerging technologies as tools, experiences of playing the digital game and cross-cultural engagement were added for Phase 2.

4.6.6.3. Post-intervention surveys: Phase 1 and Phase 2

Following the focus group data analysis, the second survey instrument was administered to both cohorts. The analysis of the focus groups informed the design of the post-intervention survey (See Appendix B). Creswell (2009) suggests that with instrument development, the researcher must obtain themes and specific statements from participants in an initial qualitative data collection phase. These themes were used to create the scales and subscales in the post-intervention instruments that are grounded in the views of the participants.

Therefore, following the focus group data from Phase 1 and Phase 2, a survey instrument was designed to gather post-intervention data regarding cross-cultural interaction, student engagement, experiences of game-based learning, and cross-cultural group work. Following the focus group discussions in Phase 2, the post-

intervention survey was further redeveloped to include questions that had emerged from the focus group discussion. This included questions about gaming, wikis, blogs and authentic learning (See Appendix D).

4.6.6.4. Reflective blogs: Phase 2

Students were invited to write a reflective piece on an open blog about their experiences of using emerging technologies (Appendix J). An open blog was used as an authentic learning tool, as it may be used outside of the academic institution. More specifically, they were requested to write about their experiences of executing an authentically designed wiki-based task (See Figure 4.8 to Figure 4.11 and See Appendix I). The reflective pieces were done on the Blogger platform.

4.7. Pilot Study

A pilot study was conducted to test the demo version (BETA-version) of the game, in order to determine whether the game would run smoothly. Participants for the pilot study were students from the previous cohort, who had already completed the module the previous year. These students did not participate in the actual study. They knew the content of the module that transitioned into the game with relative ease.

The aim of the pilot study was:

1) To determine whether the technical aspects of the game was well developed;
2) To determine the amount of time it would take to go through one gaming session;
3) To explore whether further developments should be made to the game;
4) To explore students' experiences of being engaged with the game;
5) To investigate whether the game would be feasible; and
6) To develop possible questions that could be included in the baseline survey.

4.7.1. Sample of pilot study

Five students were invited to participated in the pilot study. It was explained to them that their participation was voluntary and they could withdraw at any time. All ethics protocols were observed in the pilot study. They formed two small groups and played three head-to-head rounds, which were followed by a focus group to explore their

experiences of being engaged in the game. This also provided the researcher with a unique opportunity to pilot the research questions for the main study.

4.7.2. Data collection for pilot study

The focus group data was transcribed verbatim in English (Appendix I). The researcher did a thematic analysis of the focus group discussion. Here, similar information was grouped together into narrative clusters and analysed using Atlas TI[6]. The data were captured, coded and prepared for analysis using a thematic analysis. The text was coded by placing words or phrases together. Similar or related ideas were grouped together in thematic categories that represented students' experiences and feedback of the game. The thematic categories were then synthesised into a narrative. This narrative summary aimed at reflecting the experiences of the participants regarding their use of a digital game in the classroom.

4.7.3. Results of the Pilot study

The findings of the thematic analysis are discussed in this section. The discussion starts with an outline of the results. Pseudonyms were used to protect the identity of the research participants.

4.7.3.1. Results

Data from the pilot study were collected using focus group discussions. Data was transcribed verbatim and analysed using a thematic analysis.

❖ **Time**

In relation to time, the participants reported that they required more time to go through the questions in the game. They reported that the lack of time made them anxious and suggested that this be addressed in the final game. At the time of playing the BETA version of the game, the questions were auto allocated 30 seconds before an answer would be required.

> *I will say that time factor is a bit, it makes me nervous so I tend to rush through it instead of reading properly, but other than the time factor, it was quite good I think…Mickey*

[6] www.atlasti.com

Yho, more time. I think that time is the most stressful factor…Donald

❖ **Learning functionality**

The participants reported that the functionality of the game assisted them with understanding content. They also suggested that the game be structured into manageable sections.

The fact that it gives you the right answer when you get it wrong also helps you to remember better so that the next time you don't make the same mistake…Mickey

'…one thing could be like to have the same game like for each like 2 sub-chapters in the book for example then you don't have to do the one game for the whole book and you can focus on one chapter instead of the whole book... Daisy

❖ **Difficulty Level**

Participants in this study suggested that the game incorporate some changes in difficulty in order to challenge them.

'Is there a way for you to change the difficulty level? I know that some games have a difficulty level. SO if I am a beginner, I'll have more time, then when I feel more competent I will go to a medium or strong and then I will have less time or the same amount or more difficulty questions. Then it takes away from the fact that you're nervous because you have to answer the question. So that when you feel you have a better score or you are competent enough, move onto the next level'…Donald

❖ **Group Play dynamics**

Group play dynamics appeared to play an important role. The participants had mixed reactions regarding group work. Some reported that they enjoyed working in groups, while others did not.

'I don't like working in groups…'I don't know. I feel like I work better by myself.'...Minnie

'...because if you are in a team or pairs you can learn from each other' ...Daisy

'If you have a good group, you can work to together can learn from each other. If I am unsure about my answer, we can have a discussion.'…Daisy

❖ **Group size**

Participants suggested that with regard to the group size for playing the game, they suggested that smaller groups would be more beneficial for the purposes of progress.

'...so in that way, bigger groups are not as good as like partners or three people. The smaller the group is, the better I think it is.' ...Minnie

'Yes smaller groups'...ALL

'They'll just keep going especially with the time factor. Whereas with the two of us I can ask her ; do you agree with me, what do you think, ok we still have enough time, ok we both agree, OK choose that. With 5 people it's going to be a bit much.'...Minnie
'Possibly could work. I think the cut off would be at three.'…Minnie

❖ **Group composition**

Participants in this study reported that randomizing the group would be beneficial, as students would have an opportunity to interact with their peers as well as to work with different people as one would in the workplace.

'You must understand that other than in your classroom, socially, economically or whatever you wanna[sic] call it, you are going to have to deal with it anyway. So if you can't deal with it being mixed up in a group in a class, how are you gonna [sic] be like in a workplace. You don't have a choice. So for them forcing a mixture like that in a class it sort of gets them more open to that sort of thing. I think it will be

better. Then you don't have that thing where you gravitate towards your friends, your comfort zone.'...Minnie

'What we need to be careful of though when bringing activities into a classroom the fact that you get clicks, that will sort of hinder the whole process because if you are gonna [sic] have clicks sticking to one each other and activities it's not gonna [sic] help much'... Minnie
'if you make sure it's an integrated group then someone has a chance to work on their strength s to integrate class and get team cohesion that sort of thing, and everyone gets to know each other'...Minnie

❖ **Discussion of pilot study results**

The purpose of the pilot study was to explore the development of a digital game in sport studies. This pilot was conducted in order to test a version of a digital game and its potential impact on student learning. For this purpose, students were exposed to a BETA version of a game that was developed for implementation to facilitate collaborative learning within the classroom.

Designing learning activities in health science education is a challenge. Game-based learning is regarded as a promising vehicle to facilitate students' active participation, as well as engaged learning, and it embodies powerful principles of learning, which educators should emulate (Chen, Liao, Cheng, Yeh & Chan, 2012; Bransford, Brown & Cocking, 1999; Gee, 2003; Squire, 2003, as cited in Squire, Giovanetto, Devane and Durga, 2005).

In the pilot study, time appeared to be an important factor, as students associated lack of time to answer the questions, with a state of acute stress. Therefore, for the purpose of the interventions, the game was adjusted to allow 45 seconds per question, rather than the 30 seconds, as originally designed. Furthermore, participants suggested that the game be developed with degrees of difficulty. It was reiterated that if students were able to move through to a new level of the game after mastering an easier level, it might boost their confidence and reduce the risk of anxiety linked to time. Therefore, the game was offered in four sections in order to alleviate potential anxiety related to large bodies of work. Confidence stresses

the importance of building learners' positive expectation towards their performance on a learning task (Huang, 2011). In the same vein, the participants agreed that the game assisted in managing access to content and seemed to appreciate getting immediate feedback, while playing the game. This study concurs with that of Pivec, Dziabenko and Schinnerl (2003), who posit that a game should be motivating, so that the learner repeats cycles in a game context, in order to get feedback from game play. In this study, the game was adjusted to give the correct answer when students inputted the incorrect one.

Group dynamics appeared to be a major factor in the design and implementation of the game. Consequently, themes such as group size and group composition, were of concern. While the majority of the participants indicated their dislike for working in groups, others appreciated the affordances of group work, such as interaction, team cohesion and collaborative engagement. Pivec, Dziabenko and Schinnerl (2003) suggest that game-based learning approaches have high learning value in group communications. In this study, the participants also indicated that smaller groups would be more beneficial than larger groups. This, they felt, would eliminate the issue around time, as well as the anxiety related to time. While the rationale behind the development of a digital game in the classroom was to facilitate cross-cultural engagement, participants in this study were of the opinion that it would be beneficial to randomise the group, as it would better prepare students to work with strangers in the real world.

❖ **Concluding outcomes of the pilot study**

Although game based learning is predicted to enter the learning space in the next 2-3 years (Johnson, Smith, Willis, Levine & Haywood, 2012), gamifying the classroom in a resource poor institution, is a novel way to support the current blended learning environment. However, this study concluded that there are at least three factors to consider when developing games in sport science education. These are time, difficulty levels and group dynamics. Time appears to be a challenge for students when playing a game; for fear that they will not complete their requirements timeously. This anxiety may lead to poor uptake of the game and impact on their confidence level. Hence, this becomes one important consideration

when developing digital games in sport science education. Group dynamics is also a major factor to consider in game development for group play. This has the potential to foster collaborative learning and engagement in the classroom.

4.8. Data Analysis

The purpose of sequential mixed methods data analysis is to use the results from the first set of data to inform the results that will be obtained from the second data set (Gelo, Braakmann & Benetka, 2008). Sequential data analysis, therefore, involves an initial stage, where the first set of data is analysed following the traditional procedures of analysis. The resulting information is then used to take decisions concerning the analysis of the second set of data (Gelo, Braakmann & Benetka, 2008).

Therefore, for the purpose of this study, the data was analysed during and after the data collection process. Further information on data analysis follows in the sections below.

4.8.1. Quantitative Data Analysis

Phase 1 and Phase 2 consisted of two sets of quantitative data. This included a pre-intervention baseline survey and a post-intervention survey. The survey instrument data was coded, cleaned (using a 'match-formula') and captured on Microsoft Excel, after which it was imported into the Statistical Package for Social Sciences (SPSS v.20) in order to run analyses on the clean data. To this end, descriptive statistics was run on the data set. These included means, modes and standard deviations. The purpose of running descriptive statistics on the data set was to: "describe the characteristics of the sample; to check the variables for any violation of the assumption underlying the statistical techniques that will be used to address the specific research questions and to address specific research questions" as suggested by Pallant (2011, p. 53)

The baseline data was analysed using descriptive and inferential statistics. Means, modes and standard deviations were recorded for each scale and subscale. Cross-tabulations were conducted on the data to determine the frequency of game participation amongst students in sport studies. This provided a wealth of information with regard to the relationship between the variables (game play and demographics) in this study. Further inferential statistics was conducted on the demographic information and the subscales. This was undertaken to determine whether there was a relationship between variables,

such as gender, ethnicity and language with some of the scales and subscales, such as student engagement, online activities and learning preferences. A paired t-test ($p>0,05$) was run on the pre-test data versus post-test data, to determine whether there was a statistically discernible difference in mean scores for the following scales: student engagement, online activity and learning preferences. Thereafter a two-way repeated measures ANOVA was run ($p<0,05$) with a confidence interval of 95% on student engagement scale, learning preferences scale and online confidence scale.

4.8.2. Qualitative Data Analysis

Focus group data from Phase 1 and Phase 2 was transcribed verbatim in English in Microsoft Word. All transcripts were imported into Atlas TI for analysis. Transcripts were read several times by the researcher, after which it was coded and analysed. The researcher conducted a thematic analysis from the focus group discussions. Here, similar information was grouped together into narrative clusters and analysed using Atlas TI. Data was coded and analysed, both inductively and deductively. Deductive analysis was done by placing similar words or phrases together that related to specific questions of ones that were of similar ideas. Inductive analysis was conducted by placing ideas that were specific to structuration theory and authentic learning, as part of the theoretical framework adopted in this study (see Chapter 3). Similar or related ideas were grouped together into thematic categories. These categories were then synthesized into a narrative summary. The narrative summary is aimed at reflecting on the experiences of participants regarding the use of digital games in the classroom. The researcher later used the categories to identify a relationship between data collected and the theoretical framework for the purposes of tool mediation.

The process of data analysis of the reflective blog entries was analysed in the same way as the focus group data. Fifty-eight 500-word reflective summaries were extracted from the blog regarding participants' experiences of completing an authentic task on wiki platform. All entries were manually copied, pasted into Microsoft Word 2010 and imported into Atlas TI for further coding and analysis. The data from the blog was analysed inductively through the lens of authentic learning (Herrington *et al*., 2010).

4.8.3. Overall inferential statistical analysis

Phase 1: Paired t-test on Pre-intervention versus Post intervention data ($p<0,05$) with a confidence interval of 95% on the student engagement scale, learning preferences scale and online confidence scale.

Phase 2: Paired t-test on Pre-intervention versus Post intervention data ($p<0,05$) with a confidence interval of 95% on student engagement scale, learning preferences scale and online confidence scale. Independent t-test was run on the data sets between the cohorts. In addition, a repeated measures ANOVA was run ($p<0,05$) with a confidence interval of 95% on student engagement scale, learning preferences scale and online confidence scale.

4.9. Reliability and Validity of Qualitative information

Validity does not carry the same connotations in qualitative research as it does with quantitative research (Creswell, 2009). Creswell (2003, 2009) explains that qualitative validity means that the researcher checks for accuracy of the findings by employing certain procedures. It is recommended that qualitative researchers use at least two of the eight validity strategies to ensure validity of their findings. The eight strategies are as follows: prolonged engagement and persistent observation, triangulation, rich thick description, external audits, negative case analysis, member checks, clarify researcher bias and peer review or debriefing. For the purposes of this study, triangulation, rich thick description, member checks, clarification of researcher bias and peer review, as highlighted by Creswell (2009) was adopted as it is most relevant to this study and used in the following ways;

- ***Triangulation*** was employed, using different sources of information to provide validating evidence. Therefore, multiple data sets were collected. Data was also interpreted through a theoretical lens (Structuration theory), in order to shed light on the social phenomenon in this study.
- ***Rich, thick description*** was used by offering as much detail as possible about the settings and the participants under study. Should the characteristics of the setting, or its participants, be shared, it enables the readers to transfer information to other settings (including the findings).
- ***Member checks*** is considered to be the most critical technique for establishing credibility. The views of the participants are obtained in a study. In this case, it was by

a research assistant. The transcripts were offered to the participants and they were allowed to reflect on the accuracy of the information they had shared. During the focus group discussions, the research assistant summarised salient points and asked participants to reflect on the accuracy of the summary.

- ***Clarifying researcher bias*** was used as the researcher's positionality was confronted, because the researcher was unable to collect any of the data. However, in the interpretation of the findings a reflexive attitude was adopted, as all past experiences and biases that may affect the study was offered in the form of reflections throughout this manuscript.
- ***Peer review and debriefing*** was used where external checks were conducted. Thus, the supervisor of this study and other research mentors, acted as a sounding board aimed at keeping the researcher honest, unbiased and focused on the outcomes of the research.

4.9.1. Credibility of Quantitative Data

4.9.1.1. Reliability

Mixed methods researchers strive for accountability and legitimacy of their research results, which is necessary for drawing valid inferences (Gelo, Braakmann & Benetka, 2008). Reliability refers to the examination of internal and external consistency of the research instrument or responses (Creswell, 2009). External consistency was achieved by ensuring that when the same instrument is to be used at different times on different subjects from the same population, the findings should be the same. Internal reliability or otherwise known as internal consistency was achieved. Maree (2007) claims that when a number of items are formulated to measure a certain construct, there should be a degree of similarity between them, since they are supposed to measure one common construct. Therefore, the coefficient used to measure internal reliability will be Cronbach's Alpha coefficient. It is recommended that if an instrument has a coefficient value of 0.7, the instrument has low reliability, 0.8 moderate reliability and 0.9 high reliability. Anything below 0.6 is unacceptable. The survey instrument yielded an alpha of 0.8, which is acceptable.

4.9.2. Validity

Validity of an instrument refers to the extent to which an instrument measures what it is supposed to measure (Creswell, 2009). There are a number of different ways to ensure validity. These are; face validity, consent validity, construct validity and criterion validity (Creswell, 2009). For the purposes of this study, only the first three were used. Criterion validity is not applicable to this study as there are no existing scores or instruments to measure the same constructs within this study, since it has not yet been developed. The baseline survey was validated by Rowe, Frantz and Bozalek (2013) and further modified for the purpose of this study.

Face and content validity was ensured by allowing experts to scrutinise the instrument to determine whether, a) the instrument appears to measure what it is supposed (face validity) to measure, and b) to allow for comment before finalisation of the instrument. Therefore, the supervisor was able to determine whether the items were appropriate. In addition, one other expert reviewed the instrument.

4.10. Reflexivity

Reflexivity is the process of reflecting on the self as a researcher (Guba & Lincoln, 2005). Watt (2007) suggests that as a researcher, learning to reflect your behaviour and thoughts, as well as attending to the phenomenon under study, is a means of becoming a good researcher. Patton (2002) indicated that reporting in the active voice (the 'I') makes visible the researcher's awareness of the role s/he plays in the collection of data and the interpretation thereof. It also provides an opportunity for the researcher to acknowledge her/his own thoughts, interpretations and assumptions regarding the topic under discussion. Further to this, Patton (2002, p. 65) said that 'A credible, authoritative, authentic, and trustworthy voice engages the reader through a rich description so that the reader joins the inquirer in the search for meaning*'*. This means that the researcher provides a context and possible ways of interpreting, while giving meaning to the participants' responses and experiences.

For the purpose of reflexivity, I have written this thesis in the third person. Where applicable I will comment in the first person for the purpose of reflexive statements.

4.11. Ethics Considerations

With respect to ethical considerations, permission to conduct this research was obtained from the Department of Sport, Recreation and Exercise Science at the University of the Western Cape and Doctoral Degrees Board at the University of Cape Town. Once identified, the participants were invited to be part of the study. They were briefed on the aims and objectives of the study, the reason why they were selected, the importance of their participation, as well as how valuable their input would be. It was explained to them that their participation in the project was on a voluntary basis and that they had the right to withdraw at any time, without penalty. When they agreed to participate, they were invited to sign a consent form, which was issued to them at the start of the interviews, intervention and surveys rounds of data collection. With the permission of the participants, the interviews were audiotaped. All information again, was treated with the strictest confidentiality and the identity of participants was protected, as their names or personal information is not included in the reporting of the findings. Pseudonyms, therefore, were used. On request, the participants had access to their transcribed information. They were allowed to amend, or retract their transcripts, as well as offer additional information. For ethical reasons, the names of the participants were not recorded on both audio files (recordings), or in the research project.

Anonymity of the participants was maintained throughout the reporting of the findings. All information was treated with the strictest confidentiality and the identity of participants was protected, as their names or personal information was not included in the reporting of the findings. All data was stored in a locked filing cabinet on university property, which is only accessible to the researcher and the study supervisor. All completed surveys will be incinerated after five years.

4.12. Conclusion

This chapter covered an in-depth account of the methodological approach to this study, and a justification thereof. A sequential exploratory mixed method design was adopted in this study to answer the research questions. This chapter also contained information about the data collection, data analysis and sampling strategy adopted. The results of the pilot study were presented, which informed the further development of the digital game.
The chapter that follows presents the qualitative results.

CHAPTER FIVE

QUALITATIVE RESULTS

5.1. Introduction

The qualitative results of Phase 1 and Phase 2 of this mixed methods study are presented in this chapter. Qualitative data were collected to answer the following research questions: 'In what way does the use of emerging technologies facilitate cross-cultural engagement in the sport studies classroom? How do cultural clusters engage with each other across cultural settings, while using digital games? What mental traces enable, or constrain, cross-cultural interactions in sport studies? How does the implementation of emerging technologies affect interactions in face-to-face cross-cultural engagements in the classroom?' In order to protect the identity of the participants, codes, generated during the data analysis process were utilized, for example, [BP 3: T3-3:1]. Reference to these quotes may be found in Appendix I.

Some of the main qualitative findings will be presented to highlight how the implementation of a digital game revealed the mental structures that hindered cross-cultural interaction in the classroom. The social actions linked to cross-cultural engagement are explored in the themes that emerged. The qualitative findings below describe how seating preferences is a complex social practice and is linked to a collective understanding among students. Cross-cultural interaction is informed by acknowledgement and acceptance by peers, convenience and cliques. Playing in random culturally diverse groups allowed for a better work ethic, the development of confidence among the participants and, more importantly, negated cultural cliquing, consequently reproducing new social structures.

5.2. Themes

Various themes (main and sub-) emerged from the process of analysing the focus group discussions and reflective blog posts through the lens of structuration theory, social constructivism and authentic learning. They were as follows: Seating preferences, Acknowledgement and Acceptance, Convenience, Cliques, Allegiances, Engagement, Cross-cultural engagement, engaging with content through gamification, Benefits of gamification,

Playing in random groups, Feelings of inferiority, Levels of enjoyment, Novelty and innovation, Digital skills, Agency and Authentic learning.

5.2.1. Seating preferences

Observations of students enrolled in the sport studies programme revealed selectivity regarding the location they chose to be seated in the classroom. Although this may be perceived as an activity that reinforces agency, as their seating preferences are made independently, the composition of the groups they choose to be seated among is under scrutiny. This issue was explored through the focus group interviews to elucidate the potential reasons for this phenomenon. The findings revealed that acknowledgment, acceptance, convenience, cliques, and allegiances contributed to their seating preferences, in this particular module. This section, therefore, seeks to answer the research question, 'What mental traces enable, or constrain, cross-cultural interactions in sport studies?' The sub-themes that emerged from the main theme of seating preferences are presented in the following section.

5.2.1.1. Acknowledgement and Acceptance

As can be seen from the responses below, participants in the focus groups were comfortable to engage with familiar people in the classroom.

> *You'll always hang around people who you are more at ease with and as the year moves on you will move on and introduce yourself to friends and meet new people, so my answer will be you sit with people you feel at ease and more at home* [**BP 3: T3-3:1]**
>
> *Because no one wants to be alone [***AP 7: T1-7:2]**
>
> *Yes, acknowledgement and acceptance* [**AP 7: T1-7:3]**
>
> *For me it's not about colour, it's about people who you can relate to you, it's about people that you have things in common with* [**BP 2: T1-2:15]**

From the above quotes, it appears that the classroom, as a social institution invokes agency, to facilitate capacity for participants to build relationships and '*meet new people'*. However, there are structural elements that reinforce their interaction

patterns as they would only interact with peers with whom they '*have things on common with'* or '*feel at ease'*. In order for participants to feel comfortable in a classroom they need to be acknowledged by peers whom they had befriended because of common interests. Therefore, the link to structures of signification is apparent, as there is a collective understanding in groups. Additionally, when a student claims, '*no one wants to be alone',* it suggests that they may lack the agency to be an independent learner. This further suggests that *'being alone'* may be considered as a sanction imposed for not being in a group. This may not be deemed appropriate behaviour and, therefore, may be considered out of the norm, thereby, interactively, reproducing structures of legitimation.

5.2.1.2. Convenience

While some of the participants revealed that their preference regarding seating was based on acknowledgment from their peers, other participants retorted that it had nothing to do with peers. It appears that another factor that influenced their seating arrangement was linked to technological factors, such as the Wi-Fi capability in the classroom.

> *I decided to sit at the back in the corner because there is a plug for my laptop so I could go onto Facebook or something so if the class was not interesting I could do other stuff like download stuff without being caught and stuff.* [**AP 1: T2-1:1]**

> *If I feel like being disruptive then I sit at the back, if you come late to class and there's only one seat open you have no choice to go and sit in that one seat* [**BP 2: T1- 2:15]**

> *My friends and Wi-Fi…but Wi-Fi is stronger… They say corner is stronger…and power plugs for…ja, very strong* [**BP 3: T3- 3:4]**

The above quotes reveal that, firstly, students possess agency, as they are able to make decisions independently, consciously and deliberately, based on their social setting. For instance, a participant says: '*I decided to sit at the back in the corner because there is a plug for my laptop' and 'My friends and Wi-Fi'*. This is indicative of the knowledgeability of students, expressing practical consciousness

(agency) and awareness when making decisions about where they wished to be seated. The consequences of these actions indicated that students were able to stream videos, explore the internet, or download content in the classroom, while the lecture was in progress. This behaviour is enacted on by wielding power through the allocation of resources, thereby activating structures of domination, using facilities, such as technology, as a medium to exercise their power. Besides, the quotes above are also indicative of the decision making processes that students use to create meaning and interpretations of their actions, thus activating structures of signification, which are embedded in their practical consciousness, and reinforce their behaviour. Moreover, the understanding of participants appears to be bound by conditions in the classroom, which have particular consequences for their cross-cultural interactions. Agency also includes the capacity to act differently. Therefore, when a student is unable to make a decision about seating when '*you come late to class and there's only one seat open you have no choice but to go and sit in that one seat'* suggests that as concept-bearing creatures, the student is also able to imagine different courses of action.

5.2.1.3. Cliques

When exploring the nature and composition of groups in the classroom regarding with whom the participants in this study interacted, it was clear that modest interaction and engagement occurred between various cliques.

> *I think the nature of our class is that in a few of our classes people stick to the same group and it co-incidentally happens to be* [**BP 2: T1- 2:14]**

> *but it's not…people haven't intentionally done it but subconsciously you end up with the same people, which I also agree is wrong, so I think it's nice that for this subject you have put us in groups for specific projects and you get to know other people in the class* [**BP 2: T1- 2:14]**

> *I stick to the same people because you know it's predictable, you know what to expect, in terms of people you work with, you know their strengths and their weaknesses, so it's easier, there's a group of us that always stick together, because we do the same subjects and we are in all the same project groups, so it just makes sense to stick together*

because you get to know people more and more, which means you can build on each other's strengths [**BP 2: T1- 2:16]**

Invariably, the participants in this study revealed that the intention was not to create isolated groups/cliques. They acknowledged that it was unintentional acts and were aware that it may hinder their progress. When the participant says, '*I think it is the nature of our class*', the rules, as underpinned by the duality of structure, specifically legitimation, suggests that participants have some preconceived ideas regarding existing social practices in the classroom activities. They have created a norm for the behaviour of their class. There appears to be a social phenomenon that exists, which influences social interactions as indicated by some comments from participants, '*people haven't intentionally done it but subconsciously you end up with the same people…*' Consequently, the unconscious and unacknowledged conditions that influence social actions in the classroom has had unintended consequences for social interaction and, therefore, cross-cultural interaction. While the participants are knowledgeable beings, they are acting out social practices that have potential negative implications for cross-cultural engagement. The mental traces of a historically segregated system are still embedded in the sub-consciousness of students at the higher education institution under study, as there is clear evidence of cultural clustering.

However, they provide justification by claiming that the convenience of engaging with peers in the same group allows for deeper, more meaningful interaction with a smaller number of people. Additionally, the familiarity of engaging with the same people was appealing to the participants because they did not have additional expectations from their peers in their group. Consequently, a participant states, '*I stick to the same people because you know it's predictable, you know what to expect*'. This sentiment is echoed by many of the participants. Reflecting on the nature of groups in the classroom, students, unwittingly, appear to be working in homogeneous groups. While this may be unintentional, it is indicative that students have entered into a position of their own making and possess the agency to adapt and transform the rules on which their decisions are based, thereby activating structures of legitimation. However, it appears that a similarity in class schedules also facilitated the group cliques, as indicated by *'they do the same subjects and*

[we] are in all the same project groups'. Conversely, group composition is determined by perceptions of which students work well in projects. The participants claimed that groups '*stick together'* because they know each other's '*strengths and weaknesses'*, thereby activating structures of signification as there is collective understanding among group members and, by understanding the strengths and weaknesses, demonstrates that these actions inform their understanding of roles in a group.

5.2.1.4. Allegiances

In the classroom, seating preferences were further explored, as the mental traces students have created about where they choose to be seated, with whom they choose to be seated, and the reason for those choices may have unraveled deeper insight into their seating preferences. They said:

> *I sit according to the strengths of the people* [**BP 2: T1- 2:15]**
>
> *Ok. So you actually look at…scrutinize his work ethic…some of us is able to focus on the work so that at the end of the day* [**BP 2: T1- 2:18]**
>
> *My perspective of this is I usually sit alone, but if I require something from *Jasmine during the lecture I go and sit there and if I require something from *Aladdin or if I just feel ok in this class there's going to be more a discussion group so I'll associate myself with people who I know are going to discuss and that I can feed from so then I'll associate myself with people that I know so if I don't know anyone for instance then it's going to be difficult to associate myself with the group. Now then you'll be an outcast and you'll be alone.* [**BP 2: T1- 2:18]**

It is apparent that the participants in this study formed allegiances with stronger, more superior groups. The participants in both cohorts of this study suggested that although familiarity with members of a group was important to them, it was more important to be associated with a group that they perceived as academically strong. Deeper insights are gained as interactions based on familiarity and association with members of their homogeneous group is determined by what they may need from

peers during the lecture. A participant revealed, '*associate myself with people who I know are going to discuss and that I can feed from so then I'll associate myself with people that I know*'. There is a sense that the participants' knowledgeability about institutional practices, especially in a classroom environment, is utilised. The social phenomenon of grouping themselves may have further implications for cross-cultural interaction. The above indicates that students make strategic choices, as interaction is based on learning capital and not on culture. Contrarily, if students are unfamiliar with peers in a group, they feel like outcasts, thereby activating structures of legitimation, as this is considered a norm. As stated: '*then you'll be an outcast and you'll be alone*'. Therefore, by being an outcast, sanctions are applied when appropriate behaviour is not met. The quotes show the apparent importance of being associated with a group of students, who are academically strong, as study allegiances are formed with stronger, more prominent groups in the classroom. Structures of signification are thereby activated, as their strategic choices inform their understanding of their role and the role of their knowledgeable peer.

This highlights how the structure of legitimation is guided by group choices of the participants, as they feel that there might be repercussions for interacting with groups that may not have 'knowledgeable others'. Additionally, there appears to be a freedom of association about the choices of seating. The section that follows present the second theme, Engagement.

5.2.2. Engagement

Kuh (2007) indicates that student engagement is a predictor of student satisfaction and student success. Student engagement can be defined by two key components, first, "what students do (the time and energy they devote to educationally purposive activities) and second, what institutions do (the extent to which they employ effective educational practices to induce students to do the right things)" as previously reviewed in Chapter 3 of this document.

In this study, the theme of engagement is clarified by two sub-themes. These are, cross-cultural engagement, and engaging with content through a game-based learning approach. These themes will be explored to offer insight into research questions, 'How

do cultural clusters engage with each other across cultural settings while using digital games? How does the implementation of emerging technologies affect interactions in face-to-face cross-cultural engagements in the classroom?

5.2.2.1. Cross-cultural engagement

The diverse nature of classrooms in South African higher education should provide a rich environment for collaborative construction of knowledge. For the purposes of this study, the participants were advised that culture referred to the customs, value and ideology of a particular population, or society. Consequently, they offered their perceptions about engaging in the game with peers from various socio-cultural backgrounds.

When probed about interacting with peers from different social backgrounds in the classroom while playing the game, the participants were affronted about the concept of cross-cultural interaction. Their responses below highlight their frustration with regard to socio-cultural conversations.

> *…this culture thing is being dragged…we're still going to be talking about 'how do you feel about culture?' when we're doing our PhD's. It's not important anymore… I can't deal with this conversation anymore…I just sit next to whoever happens to be there and whoever I want to talk to…* [**AP 2: T2- 2:16]**

> *I won't say that we don't really care about going into people's background, but I can have this conversation about it and its fine. I won't go to someone to ask, where are you from, where do you live… [laughter]…* [**AP 2: T2- 2:33]**

> *…you don't want to be forced to work with people that you don't want to work with. All this cultural differences whatever! You're like almost twenty and you haven't been exposed, especially if they're sport students, you're bound to meet people from different social backgrounds* [**AP 2: T2- 2:33]**

Here there is an acknowledgement of knowing that differences do exist, and the classroom does perpetuate them because of the short period to learn from each other and about the 'other'. As can be seen from the above responses, the participants' level of frustration in this regard highlights the complexity of their thoughts on the issue of cross-cultural engagement. As knowledgeable agents, the contrasting views about the importance of culture, and the fact that they are able to give accounts about culture, shows that the participants in this study are reflexive and able to monitor their experiences and give reasons for their actions. Therefore, it appears that they possess agency in the form of discursive consciousness.

From the quotes above, structures of legitimation are apparent as the moral rules are highlighted by their responses. Several students noted and acknowledged the multicultural learning space as indicated by one student's comment that, 'if *you've come to varsity and you haven't been with people from a different social class or from a different culture, there are something seriously wrong with you!'* which suggests that they evaluate acts as right and wrong. When the participant indicates, '*you're almost twenty and you haven't been exposed*…' it means that unconscious processes link past and present, and invokes the routine and psychologically lined activities that form day-to-day activities. This is linked to time, which is integral to social practices.

Another hindrance to cross-cultural interaction is highlighted by the participants, who have reported that that do not want to be forced to interact. They state, '*you don't want to be forced to work with people that you don't want to work with'*. This suggests that they have agency to act of their own free will. However, the obstacle participants faced because of the randomisation method used during the intervention, compromised their freedom, which led to unintended consequences for cross-cultural interaction. The level of resentment on the topic of culture was raised, as many participants opined that interaction within culture could not be enforced. The perceptions of the participants in this instance were contradictory to previous claims about cultural clustering being unintentional (Section 5.2.1.3). Therefore, the mixed and contradictory perceptions about engaging in the game with peers from different cultures highlights the enabling and constraining properties of structure. On the one hand claims are that forming cultural clusters

is unintentional and unwittingly acted out, while, simultaneously, there is clear evidence that it is intentional and students purposively select peers with whom they want to interact.

Cross-cultural interaction is further highlighted under the guise of comfort zones (legitimation), however, the following participants clearly state that they are selective with whom they engage as it may affect their marks.

> *I would also try to stay in my comfort zone instead of mixing with people that I don't know because at the end of the day I'm negatively affecting my marks. I just got into another group with someone that I don't know so sometimes it's all about timing also…* [**BP 2: T1]**

> *But I think the whole objective of this is to get you out of your comfort zone and to force you to socialise. Not socialise, but to engage with other people that you don't normally engage with because if you're not invited you won't just go to BSc and visit and have a conversation-so that's where it starts in class, and then it spreads outside your circle of friends* [**AP 2: T2]**

> *Uhm, it was different. I mean we all felt awkward. [Laughter] Then we were like, ok, we have to finish the game and we all had one idea of what we needed to do* [**AP 7: T1]**

> *Go to the primary schools and let them play games and ask them. We all have our own perceptions, some of us may be still a little segregate-like all the people are set in their ways; not set in their ways but they have their own thoughts and that and like you don't want to push something, but they obviously they want to because so many wishes for like cultural integrations for the children like now as this question is going to get more outdated every single year.* [**AP 2: T2]**

There is clear evidence that cross-cultural engagement is hindered as they are selective with whom they 'mix' during the class. This stems from loss of control over their marks as interacting with people outside of their social circle, made them self-conscious, which, inadvertently, meant that their marks would be

compromised. The social practice of selectivity highlights the agency that students possess to make informed decisions. However, their decisions shape their actions, which reinforce the existing system that informs student behaviour (structures of legitimation). Whether or not the participants are selective in their interactions, the findings suggest that participants draw on their own ideas (rules) regarding interactions. In addition, the issue of socialisation was also raised by the participants, referring to the structures of legitimation, whereby sanctions (compromised marks) may be imposed because of socialisation.

While there was a distinct perception of resentment about the topic of culture, and not the interaction with culture itself, on further inquiry, the participants in this study revealed that playing the game in random social groups created cultural awareness. Consequently, the introduction of digital games reshaped social norms in the classroom.

> *Like the times when you sit with someone who is Xhosa…you are a Coloured…you try to learn some aspects of the Xhosa culture and they in turn try to learn about the Coloured way of doing things…peers across the cultural barriers … we're against group discussions with, and the I think the games allows you to talk to each other about things like that* [**BP 2: T1 2:20]**

> *My take is that it helps because guys have different mentalities and different groups have different mentalities so it helps you to understand others; how they think and how they prepare the culture and all that I think that's proper. You get to make friends because obviously you actually indulge in conversation and stuff and you have to share how and what needs to be done* [**BP 3: T3- 3:6]**

> *Ja, it's like the first thing you come, you want to sit with someone you're comfortable with. I always sit with people from the Southern Suburbs, not in class. So there's always that connection because that guy is from Mitchells Plain and I come from Ceres so you want to go and sit closer to people who are from Mitchell's Plain as opposed to those guys who are comfortable sitting next to each other* [**BP 4: T2- 4:9]**

> *I was just going to say like I think that maybe working with different cultural backgrounds…language barrier is also a factor as well, because I am just talking from experience. I had a Psych group that I was randomly assigned to a girl who was from Worcester or something like that. I literally could not understand her accent because it was very different to the way I learnt English* [**AP 2: T2- 2:34]**

Language is a crucial medium through which people address social problems together. The above responses indicate that structures of signification are apparent, as language is both an enabling and constraining factor for cross-cultural interaction. While, on the one hand, there is evidence of trying to '*learn some aspects of the Xhosa*[7] *culture*', the findings indicate that engaging with the digital game invoked agency, as the participants were taking responsibility for learning about their peers' culture, thereby enabling cross-cultural interaction. In addition, cross-cultural interactions are facilities, as participants claim that they '*indulge in conversation'* and '*you have to share how and what needs to be done*', once again, strongly highlighting structures of signification, wherein students communicate and draw on interpretive schemes to make sense of their interaction, and interpret it as meaning (signification).

Conversely, the participants indicated that the '*language barrier is also a factor as well*', which has constrained cross cultural interaction. However, it does appear that the constraining factor was not because of engaging in the digital game, but as a general pedagogical problem in the social institution. In a diverse setting, the participants are able to articulate themselves and act out social practices, but it is not immediately clear how these social practices may be maintained over a period, as there are some constraining factors linked to the understanding of others, due to language barriers. Therefore, the knowledgeability of the participants is restricted by conditions, such as language, that have had unintended consequences for their interactions. There is clear evidence of cultural clustering, which highlights structures of group norms (structures of domination), where participants are highlighting that *'different groups have different mentalities*'; however, the game assisted in reshaping these group norms. Consequently, it highlights that social

[7] isiXhosa is one of the eleven official languages in South Africa.

systems are important as it indicates that different types of societies are characterised by different social properties. In addition, geographical location, which is linked to historical segregation, is a factor affecting cross-cultural interaction.

Furthermore, it was reported that the use of the digital game assisted with building relationships, as noted in the following quotations.

> *It's a good way to build other relationship besides a new friend. So you might meet someone you might have something in common with that you could help you like later on and then you can go to that person by building that relationship during that class* [**AP 7: T1- 7:14]**

> *I feel that in the sport science group everyone is a lot more interactive and accepting of each other.* [**AP 7: T1- 7:15]**

> *It also helps us getting to know each other because half of us does not even know one another's names - it helps us to get to know one another. I think also the aspect of respect plays a role because you judge yourself on what you are not on what others are* [**BP 2: T1- 2:10]**

The participants in this study reported that the value of the game allowed them build relationships with peers which highlights the agency invoked through interacting with peers, while playing a digital game. Simultaneously, this highlights how structures of signification inform participants' understanding and interpretation of the relationship, and provide meaning to it, as suggested when one participant hey say '*could help you later and then you can go to that person by building a relationship during that class*'. This shows that participants are actively engaging in acting out social practices that inform their roles in the classroom. Structures of legitimation are also apparent, as it appears that the sport studies students are '*interactive and accepting of each other*', which appears to be the 'rules' by which sport studies students conform. It is clear from the quotes above that the game allowed for interaction and respect (agency) among peers due to the transformative capacity of material resource allocation (digital game). Additionally, respect for one another highlights the organisational rules (structures of legitimation) that justify conduct as being appropriate in the classroom setting.

Participants further reported that playing the game, as part of a random group, allowed for better communication learning.

> *That's why we get put together in life and we can actually draw from one another, so that's part of being a sociable person when you socialize with people, communication is being made more effective and you can learn to lean on other people as you allow them into your space and they allow you into their space* [**BP 2: T1- 2:17]**

> *No it doesn't make a difference. It doesn't make a difference. Usually actually it's not about being in the social background, it's about who you can interact, who you can learn from and always don't really go sit next to *Gaston or *Belle because we're fiends no, just anybody that I can learn from...* **[AP 1: T2- 1:3]**

The use of the game within a randomised group setting allowed students to be more open and explicit in their communication, as they were entering a different social space, to the one they were used to with their friends. Some participants purported that the social background did not matter, as much as the learning capital, highlighting structures of signification, where knowledge possessed by participants are applied reflexively to facilitate communication. The participant indicated that '*communication is being made more effective',* which suggests that language/communication shape social reality and the shaping of culture is determined by its language. The participants created meaning through communication/practical consciousness, thereby invoking a sense of agency, constructing knowledge with peers and engaging with others they '*can learn from'*

Another element related to structuration theory is evident in the time-space element, as one of the participants indicated '*you allow them into your space and they allow you into their space'.* This quote shows the interplay between structure and agency. As an agent, participants have the capacity to express their actions by allowing peers into their '*space*', which is indicative of discursive consciousness. This social practice allows for the understanding of social life and the context (space), in which students interact, thereby giving meaning to their actions

(signification). The following emerging sub-theme investigated participants' engagement with content, while playing the game.

5.2.2.2. Engaging with content through gamification

In order to explore further how games mediated learning in sport studies, one of the key objectives of this study was to describe the role of emerging technologies, in the enhancement of cross-cultural engagement through game-based learning. The participants in this study reported that the content of the course was made more manageable because of the game. They also conveyed that the game assisted with the recall of information, especially for the purposes of assessments. Lastly, they appreciated that the game provided an efficient and effective way to engage with a large volume of content, in a shorter space of time.

> *I think it was a good way actually because it helped learning. Maybe not in a big group like a classroom, but when you are home, studying for sure* [**AP 1: T2- 1:19]**

> *I think the game is a valuable tool as we all learn from it and like…says it can't be controlled but I mean everyone enjoys it. They find the game just to take time just to relax and stuff and we can still learn from it so ja* [**AP 2: T2- 2:21]**

> *The games are helpful considering we only have one lecture a week so what you…like where we can't cover a lot of work in a lecture, the games are a good way to make up for it. It's also the games are a good way of showing us how to actually ask a question in a test so, because there's a lot of information that they would just give us in a textbook, and that breaks it up nicely to show what's actually important and how they are going to ask it to us* [**BP 4: T2- 4:4]**.

The above narratives indicated that the participants in this study reported on the learning value of the tool as there is evidence of enabling and constraining factors to social structure. Not only could the game be accessed, while playing in a group, but also when the students were engaged in self-study or self-directed learning options, which has developed an agentic participant as could be inferred by the

comment: '*good way actually, because it helped learning'*. The content offered in the game as a resource allowed for the transformation of structures, wherein information could be learning in an easier manner and, therefore, the structural properties (facility) of allowable relaxation. Additionally, the participants' comments highlighted the legitimation structures related to the appropriate rules that govern the classroom. Firstly, the modality through which legitimation is observed is through norms, as students indicated that '*we only have one lecture a week*'. However, observed from the responses, the participants drew on facilities (modality), using both allocative and authoritative resources, such as the digital game, to produce new structures of domination. The participants also reported that the game allowed for better engagement with the content, as the work could be accessed in sections.

In addition, the participants testified about the efficiency of the game. While they conveyed the interactive nature of the game allowed for differing perspectives, the game may also provide a space for conflict, especially when there are varying viewpoints. This highlights the enabling and constraining factors of social structure.

> *It's interactive like you get to share and you get the ideas from different people, because people think in a different way …* [**AP 2: T2- 2:8]**
>
> *I think sometimes it causes conflict because I would say it's one answer then someone else would say it's another answer then we could argue then that person just presses anything that's operating the computer…you get it wrong either way…so it could cause conflict within the group…* [**BP 2: T1- 2:10]**
>
> *[you are able to grasp the little things that you expand about what is going on…quite quick and efficient, I mean if you have to sit down with a book and study you kinda [sic]like sit down and study, but if you like argue the game say for ten minutes then I'll do it later for ten minutes…makes it more efficient* [**BP 2: T1- 2:23]**
>
> *Like it takes less time because you can be for that short period of time*

you can be more productive, like instead of taking hours and you get under aroused and get bored with your books. Then the game is actually a good idea [**AP 1: T2]**

The participants in this study purported that the productivity levels increased because of the layout of the digital game. However, there were constraining factors linked to social actions. A participant indicated that, when engaging with the game, while with peers, '*sometimes it causes conflict'*. This highlights the constraining factors linked to structures of legitimation, as it informs the social interaction of the participants. However, the group conflict arose because of incorrect answers by the person controlling the computer on which the digital game was being played. Consequently, a participant reported '*because I would say it's one answer then someone else would say it's another answer then we could argue then that person just presses anything that's operating the computer'*. In addition to the structures of legitimation that is evidenced by the conflict caused, this quote indicates that the peer operating the computer exploits the resources through material facilities like a computer, to reproduce structures of domination. Therefore, this person draws on authoritative resources (facility) to produce structures of domination. The peers on the receiving end are subjected to sanctions because, as a group, they are all penalised for an incorrect answer. The participants acknowledged that the game took much less time than going through the textbook, while still feeling engaged in an interactive space. Therefore, time, as a resource, is deepened as a social phenomenon such as studying, is changed because of a digital game. Consequently, the resources used to learn (agency) has shifted from the norm of using the textbook to the modality of using a digital game, thereby highlighting the outgoing of structures of legitimation and the production of domination as the new structure.

One of the predominant retorts from participants regarding the engagement with content, was the development of agency through interaction. Agency was manifested in the recall of content.

It helped me a lot because I am one that balanced studies. So seeing it the questions on the game going through it over and over. So even the MCQ's helped me in the long questions, and it's easier for me to write

to the test when I am having fun because I can think back. Even if having a conversation with a friend and she explains something to me, I would be like ok she said that and I write it down. So it made it easier with this game… [**AP 1: T2- 1:8]**

I think it also helps when we get to write tests, because then you can … because if we are doing it right now, then when you write you must always remember that …she said it's wrong, I said it's right…you actually recall that…because it sticks in your mind…co-operation and helps each other to think quickly, also especially with the games and so on… [**BP 2: T1- 2:10]**

I think it's like just a good tool to study with; you can use it before exams [**AP 2: T2- 2:3]**

The value of the game for the purposes of memory recall seems to be a critical point for students. However, recall is enhanced because of group interactions when playing the game. Hence, the use of a digital game reshaped the students' ability to recall information in a social setting. This was achieved a student revealed that they have independently acquired agency by stating, '*I am one that balanced studies'.* This agency interplays with many forms of structure in the above quotations. Firstly, a participant shared that, '*seeing it the questions on the game going through it over and over. So even the MCQ's helped me in the long questions'* is indicative of the allocative resources that student actors are able to draw on to produce structures of domination. Secondly, the collective understanding among group members, as indicated in the quote, '*co-operation and helps each other to think quickly, also especially with the games'* indicates that structures of signification were activated. This is further affirmed by excerpts related to communication, an activity embedded in agency, as a participant stated, '*Even if having a conversation with a friend and she explains something to me',* which indicates that actors create interpretive schemes facilitated by communication through social interaction, to reproduce structures of signification. Additionally, the social interaction engaged in, while playing with peers, facilitated recall.

Like before you study, first play the games you know to see how much

you know, then you go to your book after you study, you go back to the game, before the test you just play the game all the time, all the time…at the time of the test you're like, ok I'm ready [**AP 2: T2- 2:4]**

In terms of Sport Psych playing the game it made the work actually more easier to remember basically because you get so familiar with that type of answer and you see it in the game, so like when you keep on playing the game consistently you get used to seeing the answer, so you…not the answer, the question…and the answer…ja, but I mean, you can't memorize the answer… [**BP 3: T3- 3:3]**

As can be seen from the above responses, the participants as knowledgeable agents were of the opinion that the game assisted in the memory and recall required for tests and exams. The participants revealed that they used the game as a benchmark to determine what they knew, as well as what they were supposed to know for tests and examinations. This emphasises that the game fostered a social constructivist approach to the construction of knowledge, with students using the digital game to construct knowledge. Through drawing on the digital game as a material resource, they were of the opinion that the interactivity of the game fostered retention of information, therefore, reinforcing structures of domination.

5.2.3. Benefits of Gamification

The participants in this study extended their experiences of playing a digital game in the classroom. The following sub-themes emerged from this scheme, playing in random groups, feelings of inferiority, levels of enjoyment, novelty and innovation and digital skills. Addressing these results may offer insight into answering the following research questions, 'How do cultural clusters engage with each other across cultural settings while using digital games?' and 'How does the implementation of emerging technologies affect interactions in face-to-face cross-cultural engagements in the classroom?' The sub-themes are explored in the following section.

5.2.3.1. Playing in random groups

Participants in this study reported that when they played the game in random groups, it helped them gain confidence.

I just want to share my experience…given my age, it is not easy for me to relate to everybody, especially last year, but slowly but surely, as I allowed myself to enter into other people's presence, I started gaining more confidence and I remember with the one group that I was sitting with there were about four or five and I could give some of the answers, somebody else gave some of the answers and the more I allowed myself into other people's space, I am starting to gain more confidence and starting to feel much better about myself and then it's definitely affecting my performance as well…[**BP 2:T1- 2:19]**

Obviously it does allow for interaction because it's a group assignment. It's a group thing. The game possibly can get people together as well, 'cause I mean once you start getting answers out you're more confident… [**AP 2: T2- 2:26]**

The above narratives indicated that although the randomisation of groups allowed for interaction, there was a sense that they were able to relate better with their peers. Over time, the socialisation aspect in the interaction allowed them to develop a sense of confidence, which affected their performance. One mature participant indicated that engaging in the digital game with her peers allowed her to develop a sense of confidence, which she has not previously experienced. Therefore, confidence offers structures (domination) that may impede social engagement, if it is not possessed by the participant, or promotes it if an artefact, such as a digital game is used.

While the participants claimed that they enjoyed the interaction and it developed their confidence, a serious-mindedness accompanied the group dynamics, indicating that there was an adaptation of resources in an interaction space.

I think it's actually better if you get randomly selected, because if you are going to get into a click and what are the chances that you are going to talk about work, you know what I mean, because you have something in common with all your friends like you're not going to really speak about work, that's what I think, cause like the work gets second priority at times. [**AP 2: T2- 2:10]**

You wanted to work, because when you're with friends you tend to snap off a bit and just make fun and stuff all the time. But when you with other people, you actually want to work then you want to work like not hinder [**AP 7: T1- 7:12]**

I think that if you're playing the game with your friends the game as just the game it's fine with your normal group of friends, but I think if you're playing it as a game and doing something with your friends you would know that ok, this is the one that works and this is the one that doesn't, so you tend to, if it's working towards something [**AP 2: T2-2:29]**

The participants in this study reported that the implementation of the game in random groups allowed for a better work ethic, as opposed to engaging in the game with their normal clique. There was a sense of working toward a common goal. The social phenomenon of cliques, as highlighted in Section 5.2.1.3, shows that there is a reproduction of actions in the existing system, however, the use of the digital game has allowed for the adaptation of these actions. Interactions with the digital game indicate that productivity levels increased because of randomisation. One of the participant's reported, '*when you're with friends you tend to snap off a bit and just make fun and stuff all the time'*. However, in randomised groups, there is a likelihood that students may work harder and the work tends to be more goal-orientated. A participant responded, '*when you with other people, you actually want to work then you want to work like not hinder'.* The work ethic of students, therefore, improves in a gaming activity with random peers. Consequently, the use of games, as the material resources, as well as the attributes of groups, and relationships with new people, has created new structures akin to cross-cultural interaction. However, interaction and socialisation is not guaranteed through innovative intervention, as the dynamics of group work influences interactions. It is evident that the structures of signification, domination and legitimation are transformed. The interactions of the participants were reproduced through communication strategies in groups, thereby reproducing structures of signification, because of participating on a digital games platform.

Work ethic improves in randomized groups as opposed to cultural cliques, which usually consists of known acquaintances. A participant in one focus group concurred that: '*because you have something in common with all your friends like you're not going to really speak about work, that's what I think, cause like the work gets second priority at times'*. Prioritizing work in cultural cliques becomes a secondary feature in a social system, and non-academic items are the focus of the interaction, thereby reproducing social actions that reinforce a social system of segregation, which may lead to lack of cross-cultural engagement.

Students are resentful of under-performing peers when working in groups, whether it is randomized, or not, by suggesting that it is '… *not cool because some people they don't contribute…'* This speaks to the nature of technology and the interests it draws on specific individuals. It also shows that structures of legitimation are evident, as non-contribution is deemed as inappropriate behaviour. As can be seen from the narratives above, playing in random groups is complex, as there are advantages and disadvantages, highlighting the enabling and constraining nature of structures.

Therefore, from the above findings, it is evident that the structures that underpin the interactions of cross-cultural group work are flexible. The former/outgoing structure represented one that was fraught with a lack of interaction across cultural groups, as well as with classmates, inside or out of the classroom.

5.2.3.1.1. Feelings of inferiority

The participants in this study were recruited from an arts and a science programme. Although the cohorts shared six of the eight sport science modules together in that year, the following narratives highlight how the group dynamics in the classroom were re-enacted, while playing the game in a randomised group.

> *Better, because you know your friends and it's easy to interact with them like we have a BSc. She stands there and she's like ok, this is the answer, this is the answer when it comes to the wrong answer and you like really!! Whereas if it's your friend then you*

like but it would be this because of this and that reason and I think it's easier to interact with your friends because you can reason together and you can understand why you make certain decisions. You might give an answer and you might be wrong- you don't care if it's wrong at the moment because your friends are not going to laugh at you... [**AP 2: T2- 2:27]**

You know them and like you don't care what their opinion is about you it's like you don't care man and you'll think nothing about it, you won't get violent about it, whereas with BSc you must still be accepted outside like that [laughter]. With your friends everybody just shouts at random…whereas if you're with people that you don't know you would rather not say anything than say something… and also BSc's tend to be smarter than BA's so if I was in the BSc group, I wouldn't like answer, even though I know the answer, because I won't dare to answer… so I'll just sit there and they can answer their stuff. Ja, obviously, they tend to know everything. [**AP 2: T2- 2:27]**

The responses above are complex. It is indicative of the structures that Giddens postulates regarding the interactions of agents who are guided by the rules and resources. It is clear that the communication with certain groups of students is governed by how students from a different group interpret the communication, which in this case may be non-verbal communication, also known as practical consciousness. This non-verbal communication informs their understanding of their roles when they interact with one another based on the course of study, consequently, reproducing structures of signification, as the participants understand their peers' roles. Several participants echoed similar comments as this participant who claimed, '*Whereas if it's your friend then you like but it would be this because of this and that reason and I think it's easier to interact with your friends because you can reason together and you can understand why you make certain decisions".* When linked to cross-cultural engagement, it would appear that there is a lack of engagement between BA and BSc groups, since students would abide by the dominant

norms in the classroom, again, affecting the structures of legitimation in the classroom. They tend to conform to rules, or ideas, about how they think interactions should be taking place in the classroom. Therefore, a participant claims, *"BSc's tend to be smarter than BAs so if I was in the BSc group, I wouldn't like answer, even though I know the answer, because I won't dare to answer… so I'll just sit there and they can answer their stuff. Ja, obviously, they tend to know everything',* and proceed to reproduce structures of legitimation. These structures are linked to inferiority, and hinder engagement with groups that may be linked to the power of social orders in the existing social system.

> *The one was like sitting with her laptop in front of me making as if she was listening, going through her notes, MBS notes, you see what I'm saying, so it makes you feel we don't do that kind of stuff- but not the stuff they do, so I will feel inferior when they give the answer, I will just sit there and like ok fine* [**AP 2: T2- 2:28]**

> *I just think it's cool to have people in different groups, but don't mix BA & BSc, we don't mind to travel [laughter] but don't add insult to injury. Like its ok like you can sit with BA, ja because we are going everywhere together like a family, but not BSc, because that's just looking for trouble. Put the BSc's with the BA's, they come with their jargon, we come with our jargon. I think you should not force it like if they're saying we should work with different people and whatever but you should not force it, if you don't feel comfortable within a certain group you're not going to learn* [**AP 2: T2- 2:31]**

There was a general sense of inferiority of students who participated in the Arts (social science) programme. The participants in this study were of the opinion that the Science students were smarter than they were and, therefore, reported feelings of subservience while engaging in the game with group members from the Science stream. Participants who reported that they felt subservient, conformed to the 'unspoken' rules, or structures of legitimation,

thereby reinforcing the existing systems, by being submissive in the classroom, and not actively engaging with their peers from a different study programme. Additionally, the modalities that influence the norms in the classroom informs the sanctions of social interaction, where participants '*think it's cool to have people in different groups, but don't mix BA & BSc, we don't mind to travel [laughter] but don't add insult to injury.'* The above responses indicate that, with the introduction of the game, when certain programme groups were mixed, there was also modest interaction from everyone, as they allowed others to engage with the digital game, much more. In addition, it appears that the participants created interpretive schemes, which was facilitated through communication, when they were interacting in a social learning space. One focus group indicated that that '*the BSc's with the BA's, they come with their jargon, we come with our jargon',* which clearly indicates that the participants drew on these interpretive schemes, through communication to reproduce structures of signification. Because of randomization, participants were of the opinion that '*they come with their jargon, we come with our jargon. I think you should not force it like if they're saying we should work with different people and whatever but you should not force it, if you don't feel comfortable within a certain group you're not going to learn'* thereby highlighting the constraining factors of social interaction.

5.2.3.1.2. Levels of enjoyment

The participants in this study reported their levels of enjoyment while engaging in the game.

> *I enjoy it when she is standing in front and explaining. I mean if I'm not at university I can sit in front of my computer and play a game at home and that is something that happens after a lecture, but if I come into a class I want to get something from it- and I must be on my computer then I may as well do it at home, so I think the game is good for individual work, for your own time, not lecture time* [**BP 2: T1- 2:24]**

> *Ok. I thought it was a bonus and less work…it makes it more enjoyable; I was thinking the same, it's not as complicated…ok,*

so there's the Games-Ok-it's not too formal like when you're doing the exam-it puts you in an easy mindset; you don't get bored; you have fun when you're playing the games [**BP 3: T3-3:2]**

It's a good way of learning. It's a good way of learning ne because I also think from the traditional way of learning things, where the lecturer is always in front and then delivering; at times it's better to do the games on your own as a student [**BP 4: T2-4:2]**

There is a perception that the participants come to university to listen to the lecturer and that if they had wanted to be on their computer, they might as well have stayed home. One participant retorted, '*I enjoy when she is standing in front and explaining…. I come into a class I want to get something from it- and I must be on my computer I may as well do it at home'*. The opinion of another participant was that the use of this game should be individualised. The preference of students for didactic methods of teaching is indicative of individual learning styles of students. Additionally, it highlights the duality of structure for an individual participant within the education setting. This duality is underlined by the norms, cultures and rules (structures of legitimation) that affect the participants' actions in response to the use of digital games in the classroom. The reproduction of legitimation, in this case didactic teaching methods, is facilitated by the dominant norms for this particular student. It may be that some participants with such preferences refused to abide by the rules, which are structured in the digital game. At the level of interaction, the repercussions (sanctions) thereof, may not lead to the reshaping of human actions. In addition, the time-space problematic is highlighted by the following excerpt, 'I *think the game is good for individual work, for your own time, not lecture time',* where the lecture represents space as the learning context.

However, the above is the comment of one participant. The majority of the responses show that the use of a digital game invoked agency as is evidenced

by the quotes: '*it puts you in an easy mindset; you don't get bored; you have fun when you're playing the games'* and '*It's a good way of learning. It's a good way of learning ne'*

5.2.3.1.3. Novelty and innovation

The participants were questioned about their experience of playing the game. They recounted the innovation behind the approach to teaching and learning.

> *I thought it was quite clever, whoever came up with the idea was actually quite together with a different approach to teaching. Like 90 percent of the lectures are slides and lecturers talking, students not listening- so I think it was quite clever* [**AP 1: T2- 1:18]**

> *I think it was like new. No other class do you like play games on the laptop. It was work based. It's a new concept. And I think it gives people more focused attention because people enjoy playing games as opposed to sitting in lectures listening to someone talk* [**AP 7: T1- 7:8]**

> *I think it gave a different component because none of our other subjects have it; it was like something new; something different* [**BP 2: T1- 2:6]**

The participants in this study revealed that gaming was a completely different approach to education and was their only experience of gaming in the classroom. The agency the game invoked is linked to focused attention, which they were able to achieve independently. A participant claimed that '*it gives people more focused attention because people enjoy playing games as opposed to sitting in lectures listening to someone talk.* The same quote also highlights the rules and norms (modality) students draw which reproduces structures of legitimation. The responses also show that participants entered into a learning environment, not of their own making, yet they have transformed their preferences for learning.

5.2.3.1.4. Digital Skills

Acquiring twenty-first century skills is one of the graduate attributes at the institution of higher education under study. Students related their experience of developing these skills through a process of playing digital games and engaging in emerging technologies in the classroom.

> *It intrigued me. Like many of the students don't like know how the computers is working. Like so we learn like skills in the process in future like how to use a computer, how to use internet and stuff like that* [**AP 1: T2- 1:7]**

> *It's more interactive, it's more interesting as opposed to just reading words and page and you actually getting to know if you're right or wrong You get the right answers, so it's easier to learn and because we're youngsters I think the technological aspect of it makes it more interesting than doing things in class* [**BP 2: T1- 2:1]**

Experiences of developing digital skills through playing digital games, as well as engaging in emerging technologies, allows for a deeper understanding of how computers worked and is indicative of the agency that the digital game invoked. When students enter unfamiliar territories and '*don't know how the computers is working'* the learning environment affords the academia and opportunity for students to '*learn [like] skills in the process in future like how to use a computer*'. The use of emerging technologies in the classroom creates an awareness of the importance of technology in the future, and ultimately in their working lives after they graduate.

> *Also with the Wiki assignment, it's not like people can just come and interfere with your work and there's two things I don't trust; I don't trust technology and I don't trust people and that was combined, which means anything could have happened to your work* [**BP 4: T2- 4:15]**

> *No offence, I think we're just so accustomed to doing our assignments, printing it out and handing it in. Maybe if the next generation had to come and do it from first year they'd find it really cool.* [**BP 4: T2- 4:17]**

However, while technological merit of interventions may be lauded by students, a level of mistrust exists in their relationship with the technologies that is on offer. A participant was of the opinion that *'there's two things I don't trust; I don't trust technology and I don't trust people and that was combined, which means anything could have happened to your work*'. Trust versus Distrust, therefore, becomes an important feature in developing digital skills as it implies that students need to develop trust in two areas; one with people/classmates, who had access to each other's wiki pages, and the development of trust in the technology. A combination of distrust in the two may cause students to exercise more caution when working with the emerging technologies, since trust is important for continuous stable relationships to exist. Trust is an unconscious activity and is mediated through social interaction. Therefore, the ontological security, which is trust, shapes the meaning of social interaction and structures of signification. This finding negates the objectives of this study, as it appears that some features of emerging technologies may be countering the facilitation of cross-cultural engagement. The level of trust in the interaction between the participants is compromised because of the participants' interaction with the resources provided. As a result, the structure of signification is negatively influenced because their distrust of technology, as well as the users thereof. In addition, when a participant reveals, '*I think we're just so accustomed to doing our assignments, printing it out and handing it in*' it also suggests that there are norms (modality) and rules present in the traditional classroom that reproduce structures of legitimation. The section that follows highlights the third theme of learning preparation that emerged from this study.

5.2.4. Learning preparation

Students are able to deliberate challenges and opportunities, which may arise when playing a digital game in a random group in the classroom. This was further explored with the participants of this study regarding their experiences of a gaming and emerging technology intervention in their classroom. The participants in this study offered the following accounts:

> *So you need to study to have a proper understanding; be in the lecture, attend the lecture, understand the work before you actually play the game. Otherwise it won't mean anything…ja, because if you just play the game it's like as if you are going to play to engage in a competition-so you need to study first and then to assist you with whatever you gain through your studies, playing the game also but the thing with that is it can still have that defect because when you say you're preparing for multiple choice questions with that game, that's the essence of this subject, so for me, I don't need to study, because I can go to the game* [**BP 2:T1- 2:13]**

> *I think the reason why she does it in class is because lots of people don't have their own laptops or they don't make any means of doing anything so somehow everybody gets exposure, if you're forced to doing it in class. I think that is mainly you can't force someone to learn If she gives you the games, it is your own responsibility to go through the stuff, you can't force someone to participate because it is almost like you're spoon feeding them* [**BP 2: T1- 2:25]**

The participants were clearly aware that playing the game required some preparation, which was their own responsibility; therefore, the participants come into the social system with *agency*. Besides, it indicates the need for prior knowledge that is required to play the game, thereby, affirming the social constructivist nature of the intervention, as evidenced by the following quote, '*So you need to study to have a proper understanding; be in the lecture, attend the lecture, understand the work before you actually play the game'*. Since the game is based on academic content, they would need some understanding/knowledge, in order to participate in the game. Therefore, as knowledgeable agents, they were able to take responsibility for their own learning, using a digital game.

Ok so you have to do it out of your own if you really want to learn. But it's the same with lectures also; you are not forced to come to class. I just feel it's like an extra way to help us instead of saying force, just to give everybody extra exposure. I feel in a way she is giving everyone an opportunity for exposure to working via computer to get to the game [**BP 2: T1- 2:26]**

they're expecting you to be matured and to do self-study and as you said about the first year we did computer literacy, sometimes I think some people just don't want to make the effort to go through all the trouble to do the work, so there could be good excuses and bad excuses as to why people don't access or don't try and make an effort [**BP 2: T1- 2:29]**

The responses from the participants above indicate that while it is important to attend lectures, they are not forced to do so. However, all of the participants felt that it was their responsibility to take ownership of their own learning. From the responses, it appears that the game, as an additional learning tool, allowed them easier access to developing a sense of responsibility to become *agentic* learners. Besides, the above quotations in this section provide insight into how participants create symbolic interpretive schemes that inform their understanding of their role in the classroom. As these schemes are embedded in social structure, it gives meaning to their interaction, and allows for the reproduction of signification.

5.2.5. Learning in a social-constructivist authentic environment

The following section contains the results of the blog posts submitted by the 2014 cohort after the completion of a wiki task that was designed on the principles of Authentic Learning. The results below have been analysed within the framework of the nine elements of authentic learning (Herrington, Reeves & Oliver, 2010), which are;

1. Provide authentic Context
2. Authentic task
3. Access to expert thinking and modelling of processes
4. Provide multiple roles and perspectives
5. Support collaborative construction of knowledge
6. Promote reflection

7. Promote articulation
8. Provide coaching and scaffolding
9. Provide for authentic assessment

These themes as analysed from Phase 2 are presented below. The intervention included an authentically designed wiki-task that students had nine weeks to complete. The data below was extracted from 57 blog posts.

5.2.5.1. Provide authentic Context

Authentic context mirrors the complexity of real life settings:

> *For me it will be great because like Wikis, was like a very good assignment for me personally because like it helped me with my field of work like because we are sports people we have to make profiles; we have to send it across the world maybe, where you never know who picks you up.* [**BP 3: T3- 3:11]**
>
> *What I enjoyed the most about the wikispaces site was getting to know my fellow classmates, by learning more about their background and where they "come from".* **[W13]**
>
> *The actual assignment was very interesting as we got to see the sporting achievements from our class mates. I imagined myself as a sports journalist and feel that it is a very good skill to have as it could be a job opportunity one day.* **[W21]**
>
> *it's an easier way of doing an assignment; the same with the actual assignment; let's say for example you are a coach in a team and you are trying to promote one of your star players, you can actually set up a profile for your player, sit down with him and find out exactly his background and his successes and whatever and then you can do the same thing that you did in the assignment with a profile that you're making* **[W21]**

The participants in this study reported on the complexity of the task, and that they were able to relate the theory they were offered in the classroom, of a real situation. An online

tool, such as a wiki, allowed for virtual cross-cultural interaction with an entire class, not just a group. The social practices developed transcends space, as it is a virtual platform, and time, as it is acknowledged for future use. The involvement with emerging technologies, specifically the wiki, incited agency for the participant, '*because like it helped me with my field of work like because we are sports people we have to make profiles'.* In doing so, it also informed their understanding of the role a sport psychologist has in a social institution, such as the sport environment. Therefore, they drew on interpretive schemes to create meaning in their social structure. This production of signification is further amplified through communication, as the participant gets to *'know [my] fellow classmates, by learning more about their background and where they "come from",* which highlights how cross-cultural interaction is produced in the sport studies classroom. Through an authentic context, the participants also showed awareness of the appropriate actions of a sport journalist. One participant said: '*I imagined myself as a sports journalist and feel that it is a very good skill to have.* This quote infers that they possess the practical consciousness to understand the norms (modality), which inform interaction and, therefore, iteratively producing structures of legitimation.

5.2.5.2. Authentic task

Authentic tasks activities have real-world relevance. They allow for prolonged engagement, implying that the activity may be completed over a period of time. An opportunity exists for students to detect relevant information from various sources.

> *I did enjoy this assignment but it was a lot of work to get done but there was ample time to get the assignment done. To go into more detail what I liked about the assignment: I really enjoyed the research behind the blog and that we could integrate the work we have covered in class to a real life situation.* **[W1**]

> *What I enjoyed the most was the liberty I had to write about an athlete and to share her story about her sporting career with my peers on the wiki programme. As an aspiring sport psychologist I was able to 'analyse', 'advise' and 'guide' the athlete in her career as a sports person* **[W8]**

Reading the work of our fellow classmates was the best part of the whole assignment as we realized things about one another that we had not expected at all. **[W26]**

Implementing the theory was the challenging part. It was hard to compare what the theories said to the sporting career of one of my classmates. Later in the assignment it made more sense and the theory became more understandable. I could implement the theory better after understanding **[W47]**

The wiki assignment was a fun and interactive way to share information about this course. The assignment itself was quite fun because we got to act as real sport psychologists. But I guess one of the purposes of the wiki was so that we can get to know one another **[W55]**

As knowledgeable agents, the participants reported that although there was a comprehensive amount of work to be done, it was done across an extended period of time. In addition, they were able to identify the integration between the work and activities that they may have to do, when they go into the workplace. Participants used facilities to draw on allocative resources, in order to engage in the '*research behind the blog and that we could integrate the work we have covered in class to a real life situation*'. This emphasizes how the participants were able to exercise power by exploiting the resources, such as the wiki and blog, in order to complete the authentic task, thereby reproducing structures of domination. The agency evoked through the online authentic medium, reveals that the participants learnt to share stories of peers. One participant said: *What I enjoyed the most was the liberty I had to write about an athlete and to share her story about her sporting career with my peers on the wiki programme*'. This social activity could only be done through a process of communication, where students needed to understand the role of their peer, which produced meaning, through a modification of interpretive schemes. When interpreting the quote, '*Reading the work of our fellow classmates was the best part of the whole assignment as we realized things about one another that we had not expected at all',* the link between structure and agency can be inferred, as the reproduction of society is a practical activity, in which

meaning is bound. Therefore, reading their peers profiles, also produced meaning for participants and, therefore, reproduced structures of signification. Besides, the participants revealed that, although the assignment was challenging, it was fun and interactive. The online interaction allowed for the recognition of roles in order to make sense of social action, in an online space. Students had learnt something about their classmates, using a wiki tool, which suggests that material resources (a wiki) informed social actions and allowed students to engage in a cross-cultural manner.

5.2.5.3. Access to expert thinking and modelling of processes

Opportunities to interact with counterparts that are more knowledgeable should be made available for students where they are able to share narratives and stories.

> *You learn more about Sport Psychology than using the textbook because we were on the computer and if we didn't understand something, you could check on Google* [**BP 2: T1- 2:38]**

> *Typing the information for this assignment was not a problem but posting videos and hyperlinks were quite challenging to me, as I am not that computer savvy. I was forced to seek for assistance from one of my fellow students, which I greatly appreciated.* **[W8]**

The participants indicated that for the wiki task, there were opportunities to consult with more knowledgeable others when they needed assistance with parts of the authentic task they found challenging. Although participants are knowledgeable agents themselves, the use of the internet ('*if we didn't understand something, you could check on Google)* as a material resource allowed not only for the development of agency, but also shows how participants are able to draw on allocative resources to reproduce structures of domination.

> *Just the thought of so many people having access to my assignment and commenting on it was very intimidating to me. My attitude soon changed when I received comments from peers who were actually contributing positively to my experience on the wiki even before I started working on it. I believe that critiquing is necessary in order to give someone an objective opinion of their work.* ***[W8]***

> *When the assignment was completed I found it very rewarding to read the comments on my project. It was interesting to receive feedback on the assignment and to get the perspectives from different students. This gave me the opportunity to improve my assignment* **[W5]**

The participants in this study revealed that as the entire class was able to comment on their work, was somewhat intimidating at first. One participant indicated that: '*Just the thought of so many people having access to my assignment and commenting on it was very intimidating to me'* highlights the sanctions that are manifested as intimidation. Such feelings of intimidation reproduce structures of legitimation. Interactions with the wiki lead to attitudinal shifts. Relating to comments and feedback, a participant shares that: '*It was interesting to receive feedback on the assignment and to get the perspectives from different students. This gave me the opportunity to improve my assignment*', which is indicative of the manner in which social interaction is bound in meaning. Through communication, students accessed types of knowledge possessed by peers, to create new meaning.

5.2.5.4. Provide multiple roles and perspectives

Opportunities to explore perspectives from various viewpoints, allow the student to intersect the learning environment by using multiple learning resources.

> *I think also about Sport Scientists, it gives you a greater perspective because you're looking at Sport Psychology, you're looking at the Biology part of it, you're looking at the Sport perspective of it, so it varies your perspective on Sport Psychology so not Sport Psychology, on Sport Science because it actually helps you further because you're doing an injury so that's doing your theory work on Exercise Physiology and then you're working with Sport Psychology* [**BP 2: T1-2:37]**

> *Same goes to the rest of my faculty mates, I believe majority of us were unaware of the greatness that lies in the individuals we see every day. Like I said, at first I took it for granted, but overall was worth the experience and time should I add? It made me view my peers in a different perspective, not to take anyone at face value* **[W11]**

Another advantage of blogging in relation to the assignment is that it allows people that are known and that are seen as quiet, to interact with fellow classmates **[W16]**

I must say, YouTube has helped me out immensely, with all the different kinds of videos of almost everything! Yes, there may be too many videos on one particular topic, but then it just shows how people can see or come up with different variations of things that in turn help you solve the main point. For example, when I typed in 'rehabilitation for knee injuries or surgeries, I was practically spoiled for choice and none of them where incorrect **[W29]**

*Just expressing my own views and reading other people's views and opinions and learning from them as well [***BP 2: T1- 2:36]**

Sport Psychology has really taught me quite a lot where the mind and sport is concerned. Also being able to comment on others work really helped, because I took the comments I received as constructive criticism and used it to improve my wiki, rather than allow it to break me down. I just opened myself to the opinions of others, and allowed it to improve me as a person **[W37]**

As can be seen from the participants' responses, they were able to access resources such as YouTube for additional support, therefore implicating structures of domination. Even more valuable were the multiple perspectives they received from peers, who commented on their work and gave constructive feedback, in order to improve on their final product. Communicating through the commenting feature on the wiki developed new mental schemas, as students were able to make sense of interactions, which modified structures of signification. A focus group participant purports, '*Just expressing my own views and reading other people's views and opinions and learning from them as well.'* The understanding of everyday social practices is evident in the quotes above. When participants indicate that '*Another advantage of blogging in relation to the assignment is that it allows people that are known and that are seen as quiet, to interact with fellow classmates'*, this suggests that there are norms, which impact on what some may

deem appropriate behaviour in class. It may be seen that some students prefer to be quiet in the class. However, using emerging technologies, as allocative resources, all students have the power to exploit these resources, by wielding power to produce and reproduce structures of domination. Lastly, the comment from a participant from a reflective summary '*Sport Psychology has really taught me quite a lot where the mind and sport is concerned. Also being able to comment on others work really helped, because I took the comments I received as constructive criticism and used it to improve my wiki, rather than allow it to break me down. I just opened myself to the opinions of others, and allowed it to improve me as a person'* strongly highlight the agency that has been developed as the participant shows personal development. More so, the quote implies that under normal circumstances, getting constructive criticism would make the student feel insecure, thereby, highlighting the sanctions that may be present when submitting traditional assignments. This shows the outgoing structure of legitimation, while at the same time introducing structures of domination, as the participants had the opportunity to elicit material resources to exercise power.

5.2.5.5. Support collaborative construction of knowledge

Students were afforded an opportunity to work in pairs in a broader community.

> *It was really nice having to share ideas by commenting on someone's wiki. This really helped in producing a quality assignment and it is as if we were working as a group not individually. A wiki gave me an experience of easy communication and a sense of team work. Since we were able to see each other's wiki's it was easy to be able to come up with a new idea and editing the wiki was quick and easy. It was really interesting and nice to experience and see comments by other students on an assignment because, if the assignment was to be done in another format, we couldn't have got this experience* **[W41]**

> *The theory part ja, but not like asking the interviewing, you had to implement the theory into what you interviewed, applying it. So it was more complicated? Yes. Ok. But I think it did help a bit, I mean you've got a proper understanding of…because you must be able to understand before you can apply; you can't just write…you have to*

*understand and have knowledge of whatever constructs of what she is talking about and then you try and apply it in life situations [***BP 3: T3-3:16]**

The advice and comments I received on the wiki was very constructive and helped me a great deal with the composition of my athlete profile. Input from others always makes a huge difference and in most cases is very beneficial. Reading some of the athlete profiles had made me realise that we hardly know our fellow students and I saw this as a platform to get to know one another and learn others experiences. It is always interesting to read about the interests of others and their achievements. I learnt things about people that I communicate with every day and never knew how talented they really are. ***[W4]***

It is also important to be as honest as possible when commenting and to remain unbiased. Being able to comment is one of the useful features of the wiki program that enables a writer to receive honest feedback - it could be positive or negative but should be constructive of nature

I felt free to use my creativity and the wiki assignment also assisted me in learning and understanding the content, within the parameters of sport psychology, as we were encouraged to practically use and associate the information we learnt within our assignments. It was also interesting to read through other people's profiles and learn about their sporting backgrounds, triumphs and failures. I am not familiar with everyone in the class and therefore it provided me with an opportunity to learn about these individuals and what gives them their identities ***[W12]***

The responses from the participants above revealed that the seamlessness with regard to communicating on the wiki assisted them when working in virtual groups, as they were able to generate new ideas for their final task. The participant said, '*A wiki gave me an experience of easy communication and a sense of team work',* therefore, indicating that through a process of social interaction they were able to communicate by drawing on interpretive schemes, in order to produce and

reproduce structures of signification. This is amplified as there is a collective understanding among group members. They also reported that being afforded the opportunity to integrate theory, builds on previous knowledge obtained through the module. This is indicative of the application of prior knowledge and experience, while using reasoning and critical thinking skills, which are common in social constructivist thought. This can be gathered from the following quote, '*…you have to understand and have knowledge of whatever constructs of what she is talking about and then you try and apply it in life situations'*. Furthermore, they were of the opinion that advice given by their peers was constructive and assisted with the composition of their final product. Shared norms and values are drawn on from resources in the social system linked to cross-cultural engagement. The wiki made students feel like they were in a group, when, in fact, it was an individual assessment.

5.2.5.6. Promote reflection

Reflection allows students to compare their ideas to experts, teachers and more knowledgeable others. They are enabled, therefore, to make decisions on how to complete the task and move freely in and out of the wiki space.

> *found the blogging was nice because I could read what people thought about the subject, about…like aggression was one of the topics; like *Bambi, what she thought, how I disagreed with her, how I agreed with her and what my personal reflection is on it. So it was actually good. [***BP 2: T1- 2:40]**

> *The assignment was exciting as it provided an opportunity for you to get to know your classmates better as you can see their background and actually notice how similar it is to yours regarding the sporting front. When it came to commenting on one another s assignment it gave an opportunity for us to view each other's wikis which was nice and interesting as it gave us the opportunity to read about people in class whom you don't know and have never spoken to them* ***[W14]***

> *I now look at my peers with respect and admiration because of all they had to endure to get where they are today.* ***[W22]***

The responses reveal that reflecting on peers' comments on the class blog was useful. The development of agency is evidenced by the actions exhibited on the emerging technology platform. One participant indicated '*how I disagreed with her, how I agreed with her and what my personal reflection is on it',* which suggests the participant is reflective and able to reason in a social learning context. It also appears that in the social constructivist space, the participants are able to give meaning to the content and interaction with peers.

The responses also indicate that the structures that people create, such as social interaction, has provided opportunities to observe new possibilities for interaction by using emerging technology. Furthermore, one participant shared: '*When it came to commenting on one another's assignment it gave an opportunity for us to view each other's wikis which was nice and interesting as it gave us the opportunity to read about people in class whom you don't know and have never spoken to them'* therefore highlighting the reformation of social practices which is key in the duality of structure.

5.2.5.7. Promote articulation

The complex task incorporates inherent opportunities to articulate beliefs and growing understanding. Because of group encouragement, the articulation of multiple ideas is fostered. Public presentation may enable articulation.

> *Ja, I enjoyed it…I prefer assignments like that. I like working in an interactive space because we're human beings and you're interactive, otherwise you're sitting at home doing your own work coming and handing it in whereas this you're working and you're learning from other people as well [***BP 2: T1- 2:41]**
>
> *I think it is a good idea to have a site that is dedicated to a particular group of people, such as ourselves. I have learnt more about people in my class and have heard the opinions of people that don't often speak up in class. I found myself 'in the zone' with this project. I could have kept writing as it was an assignment that really appealed to me. I love finding out what makes people tick, and why people enjoy certain types of sports over others. I learnt more about the person that I was writing*

about, and not only that, but also more about their particular sport. I found some valuable information that I will apply to my own sport as well. ***[W2]***

It also allows people to really think about what they have to say before they say it. This gives their writing more conviction as they have obviously really thought about what they wanted to say and made sure to say it as clearly as possible. ***[W2]***

I think blogging is something that is going to be the best way to improve education and general knowledge because reading other people's blogs helped improve writing and knowledge about different things they were writing on. It also helped comment on peoples work and giving them advice on how to improve ***[W3]***

The participants in this study purport that learning about their peers on a wiki, allowed them to articulate their own ideas in their own wiki pages. A participant purports, *'I like working in an interactive space because we're human beings and you're interactive.'* This quote highlights how social actions implicate the production and reproduction of structures. The practical consciousness embedded in what the participant is saying, suggests that they are able to orientate themselves based on the situation, and interpret the actions of others. The participant goes on to say that*, 'otherwise you're sitting at home doing your own work coming and handing it in whereas this you're working and you're learning from other people as well'* which highlights that by working at home, on your own, is a norm, which is sanctionable, if there is not social interaction with peers. There may be less learning, which, therefore, amplifies structures of legitimation. In addition, they were able to write more clearly, based on feedback, what they were giving and receiving from their peers. The social constructivist nature of the task using emerging technologies highlighted how the participants generate knowledge and improve academic skills in the online space. A participant says, *'the best way to improve education and general knowledge because reading other people's blogs helped improve writing and knowledge about different things they were writing on'*. Therefore, the quotes above also infer that a constructivist approach offers better opportunities for collaborative interaction and learning.

5.2.5.8. Provide coaching and scaffolding

The lecturer or tutor was available for assistance for a significant portion of the activity. Collaborative learning allows abler students to assist with coaching and scaffolding.

> *The assignment gave the class an opportunity to communicate and understand Sport Psychology from someone else's view. This project in particular helped me to understand the work that we covered, not only in Sport Psychology, but to apply my knowledge from other subjects as well.* ***[W5]***

> *This essay was a bit of a struggle for me in the beginning due to me not being too good at working computers. It also made me nervous as what people would think of my work but it helped me in the end. In the beginning, I was confused as to what exactly we had to do but by me looking at the example on the website, it guided me and showed what had to be done* ***[W23]***

> *Also by applying the information learnt in class and from reading the textbook, by using it in a practical way made the work easier to understand and easier to remember. Using the wiki for the assignment was a nice way for everyone to get to know their classmates better and also to learn more computer skills.* ***[W27]***

> *I also a bit anxious to use the wiki because the whole class including the lecturer can see my work so that was nail biting experience. Though it made get more comfortable with my peers and build confidence with myself with my work, I do not want to use such a platform though it is much more convenient.* ***[W39]***

Participants reported that although they were confused about the task at the beginning, they were able to reach out for assistance, when needed. Mostly, they sought assistance from fellow peers before attempting to contact the lecturer, or tutor. However, through a process of communication, a participant said, '*The assignment gave the class an opportunity to communicate and understand Sport*

Psychology from someone else's view'. This shows that the participants developed their own interpretive schemes, through which they were able to understand their role in the classroom as a 'sport psychologist', thereby activating structures of signification. Additionally, there is more relevance to job and out of class performance, which is one of the strengths of social-constructivism. The application of knowledge in the relevant context is also indicative of the nature of a social-constructivist learning space. The participant indicated that, '*Also by applying the information learnt in class and from reading the textbook, by using it in a practical way made the work easier to understand and easier to remember'.*

Despite the effectiveness of the tool, participants also expressed negative emotions with regard to the wiki assignment. One participant indicated, '*It also made me nervous as what people would think of my work but it helped me in the end'.* This suggests the activation of structures of legitimation because the norms of the wiki allowed for peers to view and comment on the page. These norms informed the interaction of peers, which invoked feelings of nervousness (sanction). These sanctions highlight the negative outcomes of structures of legitimation.

5.2.5.9. Provide for authentic assessment

The participants were given the opportunity to refine their final product due to the extended period allowed to complete the task. The assessment is integrated into the activity and not assessed by means of separate testing. There are multiple assessment measures for one task.

> *I found this assignment to be challenging at times, especially the recommendation section. This is because there was a lot of work to do and a lot of research. Another challenge was the amount of work load but there was plenty of time to finish up the assignment. I spent a lot of time producing an assignment to the best of my abilities but I believe that I could have done better* ***[W1]***

> *Another aspect that I was really fond of was the fact that we could comment on each other's wikis. I could help them improve their wikis and they could help me to improve on my wiki. We could also commend each other's work, which was awesome* ***[W13]***

Being criticized by fellow students in the comment section was encouraging because it was kind of like peer assessment. ***[W18]***

The participants in this study reported that they were able to comment and provide constructive feedback, as a form of peer assessment, which shows the interactive nature of the social constructivist space. In addition, the challenging nature of the task indicates the focus on problem solving and critical thinking, in order to develop higher order outcomes, which are also embedded in constructivist thinking. Consequently, a participant shared, '*I found this assignment to be challenging at times, especially the recommendation section.'* In addition, they recognised that, due to the workload, they acknowledged that they were able to spend enough time working on their project. Within the social constructivist space, agentic learners were able to offer feedback to their peers, through a commenting function on the wiki. One participant responded, '*I could help them improve their wikis and they could help me to improve on my wiki. We could also commend each other's work, which was awesome'.* This comment shows how the process of communication allowed students to understand their role and create meaning, with regard to their role in the online space.

5.3. Summary of Results

This chapter provided insights into cross-cultural interaction of students, based on the results generated from the data collected in Phase 1 and Phase 2. The results of the themes and sub-themes were presented. The main findings emanating from the qualitative data following an inductive analysis, reveals that seating preferences is a complex social practice, where there is evidence of shaping and reshaping of social practices depending on the classroom situation. Section 5.2.1 presented the results related to seating preferences. The results show that seating preferences is linked to agency, as participants independently choose their seats. This is linked to a collective understanding that impact on cross-cultural engagement, as students need to be acknowledged and accepted, which amplifies structures of signification. In addition, students decide on seating preferences based on convenience (Section 5.2.1.2), such as Wi-Fi access (material resource). Additionally, acknowledgement and acceptance (Section 5.2.1.1) results reveal that the routinized manner, in which they select their seats suggest there is a tendency to reproduce existing social practices based on their need for a sense of belonging. Students admitted to organising themselves in homogenous groups, or cultural clusters (Section 5.2.1.3)

which supports the anecdotal evidence of this study, that students form cultural clusters in the classroom. The mental traces of segregation on the minds of students, who unintentionally conform to social practices, reproduce the existing social system of cultural grouping. However, contradictory findings suggest that on the one hand students claim that cliquing is unintentional, yet they also state that they 'mix' with peers they feel comfortable with, which suggests that these selections are made intentionally. This highlights the complexities in identifying and activating the rules and resources that affect social practices.

Additionally, allegiances were formed because many students were selective about interacting with peers (Section 5.2.1.4). Additionally, geographic location appears to influence decisions to interact with multicultural peers. With regard to cross-cultural engagement (Section 5.2.2.1), one of the main findings is linked to comfort zones, as the participants refused to be forced to work with people they did not want to work with, for fear of compromised marks, thereby activating structures of legitimation. The level of respect among peers increased, which suggests that the organisational rules justify the appropriate conduct in the classroom, thereby activating structures of legitimation. Explicit communication was also observed, through use of the game. The structural properties of the game allowed for a change in learning practices. While diverse perspectives were acknowledged by peers, there is evidence of conflict, when there were disagreements about answering the game questions in the group, as shown in section 5.2.2.1. Therefore, differing perceptions could cause dissension, when not everyone agrees. Social and cross-cultural interactions were reshaped, as students drew information from knowledgeable peers, when playing the game (Section 5.2.2.2). With regard to the benefits of the game, there is evidence that confidence (as a structure of legitimation) impedes cross-cultural interaction, thereby drawing on structures is observed, while other students develop confidence through working on the game. Findings show that playing in random culturally diverse groups allowed for a better work ethic and the development of confidence among participants (Section 5.2.2).

Cultural cliquing was negated by playing in random groups (Section 5.2.3.1). Feelings of inferiority (Section 5.2.3.1.1) hinder cross-cultural interactions as group dynamics and social practices were reinforced by students, who felt a sense of inferiority. This was self-inflicted. The findings show that the digital game implemented in this study enhanced cross-cultural interactions as the participant's narratives reveal that differing opinions and mentalities from different groups allowed for further conversation, relationship building, acceptance, respect

and constructive and effective work and social practices in the classroom. This has led to effective learning.

When engaging with the content, while playing the game, it was revealed that smaller group play was beneficial, as the interactive space allowed participants to share ideas and accept differing perceptions. The digital game used in this study also allowed for memory recall and was used as a benchmark to determine what they knew and needed to know. This was another finding, linked to the benefits of the gamified space in the classroom. However, while the participants enjoyed the use of the game in a blended learning environment, there was still a sense of inferiority felt between programme groups. Another main finding in this study is that participants acknowledged that they needed to take responsibility for their own learning (Section 5.2.4).

This chapter also revealed the results of an authentically designed wiki-task, which was only offered to the 2014 cohort. These results were analysed through the lens of authentic learning as offered by Herrington, Reeves and Oliver (2010). Regarding authentic learning, the findings show that the task represented the complexity and challenge of real life settings and, therefore, provided an authentic context. The wiki tool allowed for virtual cross-cultural interaction of the entire group, and not only a small group, as was performed, during the game, as seen in Section 5.2.5.1. Relating to the authentic task under Section 5.2.5.2, there was recognition of the roles of peers that gave meaning to their interaction through the wiki. Additionally, the participants expressed that they had learnt something from their classmates, which may indicate that the structural properties of the wiki created conditions that facilitated social interactions between peers.

Section 5.2.5.3, which relates to access to expert thinking and modelling processes, reveals an attitudinal shift was observed, as students were apprehensive about the open accessibility to their task and that peers could view and comment on their work. However, over time, the attitudinal change occurred, as they viewed the contributions as positive, therefore, their peers became the experts. Through communication, students drew on the knowledge possessed by peers in a multicultural classroom to construct knowledge. The interactivity of the wiki in a multicultural online space, revealed that the provision of multiple roles and perspectives (Section 5.2.5.4), where even students, who were considered to be introverts were seen to be interacting with peers online. The commenting feature of the wiki allowed students to make

sense of perspectives from a diverse class, and in doing so, they were able to complete their authentic task. One important feature of doing this wiki, in an authentic framework, means that the task itself should support collaborative construction of knowledge (Section 5.2.5.5), where it is evidenced that newly developed, shared norms and values assisted in the completion of the final task. Additionally, the task made students feel like they were working in a group on an individual assignment. Findings reveal that reflecting on other people's comments was useful reflective practice (Section 5.2.5.6)

The interactivity in a multicultural online community was valued over the traditional approaches to assignment submission, as the space allowed for improved writing skills to be developed (Section 5.2.5.7). Coaching and scaffolding (Section 5.2.5.8) indicated that the academic was available for assistance, but if needed, they would seek assistance from knowledgeable peers first. Lastly, in providing authentic assessment (Section 5.2.5.9) the findings show that peer assessment was a constructive way to execute the task, which meant that the students had to engage adequately in a multicultural space.

In contributing to answering research question 3, 'How do various cultural clusters engage while using digital games?', the results offer insight into the students, who appear to be selective about whom they choose to interact with, therefore, reinforcing dominant social norms of clustering in homogeneous groups. Various barriers, such as language and geographical location, hinder cross-cultural interaction, however, the digital game allowed the participants to interact with peers, they would not normally engage with in the classroom.

A detailed discussion of the themes presented in this chapter, as well as the results of the qualitative data, will be offered in Chapter 7. The following chapter comprises the quantitative results of this study.

CHAPTER SIX

QUANTITATIVE RESULTS

6.1. Introduction

This chapter contains the statistical findings related to the use of digital games in the classroom. The purpose of collecting this data was to analyse the level of cross-cultural interaction in a sport studies classroom, and to investigate how these interactions are produced and reproduced. Consequently, four sets of quantitative data were collected from two Cohorts of the same level of study, over a period of two academic years. The participants of Phase 1 completed a pre- and post-intervention survey. Similarly, the participants in Phase 2 completed a pre- and post-intervention survey.

During Phase 1, 94 students engaged with the digital game. Thereafter, they were all invited to participate in this current study, of which 64 voluntarily agreed to complete the baseline survey. By the end of the intervention, 42 participants remained in the study and completed the post-intervention survey. Thirty-eight surveys, returned from the post-intervention data collected, could be matched to the pre-intervention data of Phase 1.

During Phase 2, 77 students engaged with the digital game. Thereafter, they were all invited to participate in this current study, of which 42 voluntarily agreed to complete the baseline survey. By the end of the intervention, 43 participants remained in the study and completed the post-intervention survey. Twenty-Eight surveys from the post-intervention data collected, could be matched to the corresponding baseline surveys of Phase 2.

Section 1 of this chapter contends with the demographic information of the participants. For the purposes of this study, gender, ethnicity and year of study are represented. Section 2 explores the frequencies and descriptive data regarding, the participants' experience and exposure to digital games (inside and outside the classroom); their perceptions of the value of digital games for education; their participation with regard to gender and ethnicity; playing digital games in randomised groups; engaging in games across socio-cultural contexts; social networks for learning and the authenticity of a wiki-based task. The final segment, Section 3, contends with the repeated measures ANOVA, which was used to determine whether there was a difference between pre- and post-intervention scores of the participants in Phase 1 and Phase

2, regarding gamifying the classroom, across a period. A summary of the results, in relation to the research questions, is offered at the conclusion of this chapter.

6.2. Section One: Demographic Information

The demographic table was presented in Chapter 4 (See Table 4.5). An explanation of the demographic information of the participants who participated in Phase 1 and Phase 2 of the current study, is presented. The demographic information includes, gender, ethnicity, home language, degree of study and year of study. Phase 1 and Phase 2 revealed the following demographic information of the participants. Brief explanations of these results follow hereafter, as gender, ethnic and level of study distribution.

6.2.1. Gender distribution

Of the participants in Phase 1, 67.2% (42/64) were male and 26.6% (21/42) were female. The data shows that there was a more equitable distribution in Phase 2 with 50% (32/64) of the participants being male, and 47.6% (20/42) female. Some participants chose not to disclose their gender.

6.2.2. Ethnic distribution

The majority of participants in Phase 1 regarded themselves as Coloured, comprising 60.9% (39/64) of the sample, followed by 15.6% (10/64) comprising White participants and 6.3% (4/64), African participants. In Phase 2, the spread of ethnic distribution is more uniform, with Coloured participants at 30.9% (13/42), African at 21% (9/42) and White at 23.8% (10/42). The ethnic distribution in both phases show that African students account for the lowest numbers in the classroom. This is indicative of the disproportionate access to higher education by students from historically disadvantaged populations. In addition, the ethno-cultural distribution informs the disparate cross-cultural interactions in the classroom.

6.2.3. Level of study distribution

The majority[8] of the participants, in both cohorts, were second year students, with 93.8% (60/64) and 90.5% (38/42) in Phase 1 and Phase 2 respectively. In each cohort, there was one repeating student.

[8] This module could be taken as an advanced module by first year student, or carried into the third year by repeating students. Therefore, repeating students in this case were legitimate third years who are carrying a second year module as permitted by the programme rules.

6.3. Section Two: Participation in digital games in sport studies

This section offers numeric insight into the participation in digital games for cross-cultural interaction, interaction preferences and learning, in a social constructivist, authentic learning environment. The data below represents the participants' experience of digital games across Phase 1, as well as Phase 2, and informs the social activities that the participants engage in and the level of interaction. It also works towards answering the research questions, 'How does a student's prior educational experience inform cross-cultural interaction using digital games?'; 'In what way does the use of emerging technologies facilitate cross-cultural engagement in the sport studies classroom?'; 'How do cultural clusters engage with each other across cultural settings, whilst using digital games?'; and 'How does the implementation of emerging technologies affect interactions in face-to-face, cross-cultural engagements in the classroom?' An in-depth discussion of these results is offered in Chapter 7 (See Section 7.4).

6.3.1. The participants were asked about their experience in using social networking, prior to participating in this study. These technologies were later used in the intervention component in Phase 2 of this study.

Figure 6.1 offers the levels of experience regarding technology usage.

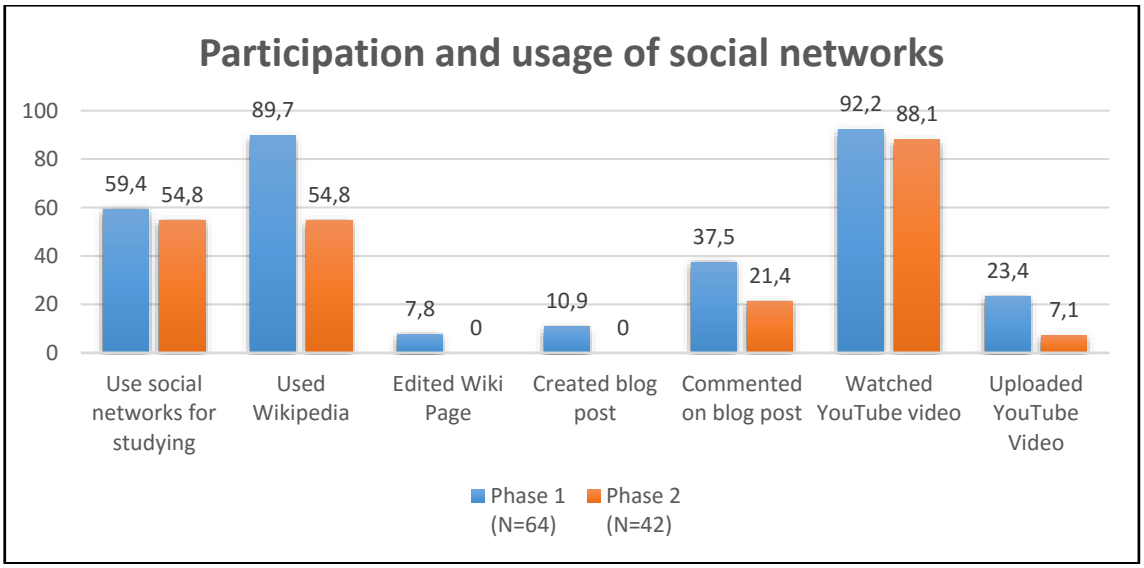


Figure 6.1 Participation and usage of social networks.

Figure 6.1 indicates that 38/64 (59.4%) and 23/42 (54.8%) of the participants, in Phase 1 and Phase 2 respectively, make use of social networking for study purposes. It may be that the dominant social practice for students is to use social networks for studying,

thereby suggesting that by interacting on these platforms, their actions reinforce the existing system of online social interaction. Therefore, 38/64 (59.4%) and 23/42 (54.8%) participants of the respective cohorts, indicated positively, to using social networking for the purpose of studies. This suggests that students were engaged in social learning practices of their own making, signifying that students most likely reinforcing an existing social system, although 57/64 (89.7%) participants from Phase 1 reported using the social networking Page-Wikipedia, while only 5/42 (7.8%) participants have edited content on this platform. The results show that 23/42 (54.8%) participants from Phase 2 used Wikipedia 23/42 (54.8%), and none (0%) had edited content on this platform. Therefore, the implementation of a wiki task in Phase 2 of this study was to allow for better social interaction and to afford the students the opportunity to engage with an emerging technology tool, of which they had no experience in editing, and in the process, develop a new digital skill.

A mere 7/64 (10.9%) of participants from Phase 1 created a blog post, however, 24/64 (37.5%) indicated that they had commented on a blog post previously. None of the participants from Phase 2 had created a blog post before; however, 9/42 (21.4%) reported to commenting on a blog. This may suggest that the participants in this study were not comfortable engaging with this tool. A blog was introduced in Phase 2 as part of the intervention to facilitate interactions using the Blogger platform. Low reporting on these tools suggests that social interaction on these platforms may not be a regular activity and, therefore, not many students used the platform. Similar to that of the wiki platform, the participants could be reproducing dominant norms related to the under usage of social networks for learning on a blog application.

A high percentage of participants from Phase 1 (59/64 [92.2%]) and Phase 2 (37/42 [88.1%]), indicated positively to watching YouTube videos, however, fewer participants uploaded content of their own, which suggests high levels of consumption but not production of content with this tool. Compared to the high percentage of participants who watched YouTube videos, only 15/64 (23.4%) participants from Phase 1 and 3/42 (7.1%) from Phase 2 uploaded content onto YouTube. This could be linked to the structural properties of the application that facilitates conditions for interaction with the technology.

6.3.2. The frequency of their participation in digital games prior to intervention.

Table 6.1: Participation in of digital games

Participation	Phase 1 (N=64)		Phase 2 (N=42)	
	n	%	n	%
Played educational games before	30	53	12	28.6
Played console games	53	82.8	28	66.7

Table 6.1 illustrates that Phase 1 had a higher number of participants who have played educational games, before consenting to participate in this study. Accordingly, 30/64 (46.9%) participants in Phase 1 played educational games before, as opposed to 12/42 (28.6%) participants in Phase 2. Educational games were viewed as games that related to academic content. However, there was a higher number of participants in both cohorts, who had played console games, such as Xbox and Wii; namely, 53/64 (82.8%) and 28/42 (66.7%) participants from Phase 1 and Phase 2 respectively.

6.3.3. The cross tabulation of the number of participants who had played digital games before by gender, ethnicity and year of study.

Table 6.2 illustrates the cross tabulation from the baseline data, which provides deeper insight into the variation of exposure to games, among the participants in this study.

Table 6.2: Cross tabulation of game playing and demographic variables

Played Digital Games Before		Phase 1 (N=64)		Phase 2 (N=42)	
		n	%	n	%
GENDER	Male	40	70.2	16	51.6
	Female	14	24.6	14	42.5
ETHNICITY	African	3	5.3	8	25.8
	Coloured	34	59.6	10	32.3
	Indian	3	5.3	6	19.4
	White	10	17.5	6	19.4
	Other	1	1.8	0	0

Table 6.2 reveals that 40/64 (70.2%) of males and 14/42 (24.6%) of females in Phase 1 had previously played digital games. These numbers invariably change, as the activities

of the participants in Phase 2 reveals more equity, as 16/42 (51.6%) of males and 14/42 (42.5%) of females previously participated in digital games. While a higher number of males positively indicated that they had previously played digital games compared to their female counterparts, there appears to be an increase in the percentage of females engaging in digital games from Phase 1 to Phase 2. The results above are indicative of the gender inequities with regard to participation in games. In addition, a mere 3/64 (5.3%) of African participants from Phase 1 had previously played digital games, as compared to 8/42 (25.8%) of the same ethnicity in Phase 2. Table 6.2 also shows that 34/64 (59.6%) of Coloured participants in Phase 1 played games before, and a mere 3/64 (5.3%) of Indian participants reported positively.

Phase 2 data reveals that 10/42 (32.3%) of Coloured participants engaged in games before, which is less than in Phase 1, while White and Indian participants showed that 6/42 (19.4%) each had played digital games before this intervention took place. The results above are indicative of the inequities, which could be linked to historical segregation, where disadvantaged groups, particularly African, were at a distinct disadvantage and, therefore, may not have had access to electronic resources.

6.3.4. The distribution of participants' use of a digital game in the classroom, in relation to test preparation and revision of work.

Table 6.3: Percentage using the digital game as a preparation tool.

	Phase 1 (N=46)					Phase 2 (N=43)				
%	SA	A	U	D	SD	SA	A	U	D	SD
I prepared for test by working with other students	17.8	28.9	8.9	35.6	8.9	10.3	35.9	5.1	23.1	25.6
I prepared for tests using the game	47.8	37.8	6.7	6.7	0	30.8	56.4	5.1	2.6	5.1
I used the game to revise my work	44.4	42.2	2.21	8.9	2.2	18.4	52.6	13.2	7.9	7.9

* SA= Strongly Agree; A=Agree; U=Uncertain; D=Disagree; SD=Strongly Disagree

Table 6.3 illustrates that the participants from Phase 1, generally, were divided in their responses regarding the test preparation by working with fellow students. The general responses of participants in Phase 1 vary from strong agreement to strong disagreement.

The results show that most participants did not prepare for the test by working with other students; however, more students used the game to prepare for test. This result suggests that the availability of a digital game allowed participants to adapt the rules regarding test preparation because of their interaction with the game. Generally, most participants in both Phases presented a high affinity for test preparation using the digital games, and similarly reported that they used the game to revise their work, which, again, is indicative of a change in practices (structures) of preparation. The data shows that as a material resource, the use of a digital game created conditions for the transformation of test preparation practices.

6.3.5. The frequencies of participants' experiences of playing digital games in randomised teams.

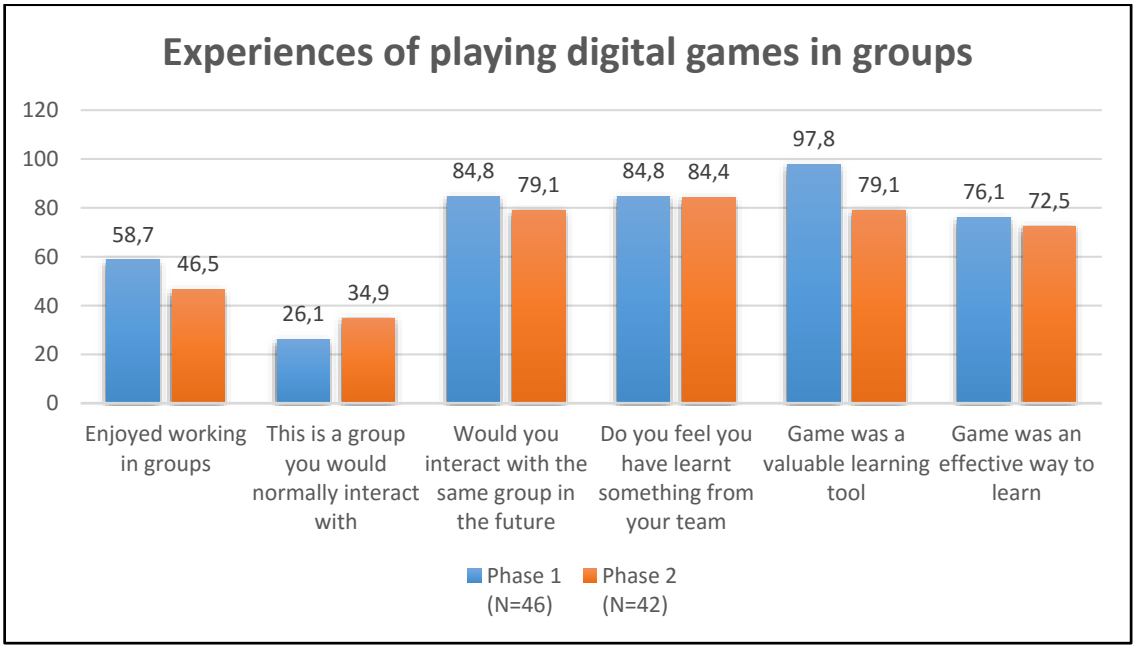


Figure 6.2: Frequencies on experiences of playing games in randomised groups

Figure 6.2 shows that 27/46 (58.7%) of the participants from Phase 1 enjoyed playing games in groups, while fewer participants, 20/42 (46.5%) experienced the same in Phase 2. Following the randomisation of teams, both cohorts indicated that none of the groups they were assigned to was groups that they would normally engage with in educational activities. Therefore, only 12/46 (26.1%) of the participants in Phase 1, and 15/43 (34.9%) from Phase 2, routinely interacted with the random group members on previous occasions. This is quite low for cohorts who had been in a sport studies programme for one-and-a-half years, which indicates a lack of cross-cultural interaction in the class, with

students recursively aligning themselves with the same group, which is largely homogeneous. However, following the intervention the majority of the participants, 39/64 (84.8%) from Phase 1 and 34/42 (79.1%) from Phase 2, expressed that they would interact with the same group in future, which demonstrates that the use of digital games facilitated cross-cultural interaction. The results possibly indicate a production of new structures of legitimation, signification and domination, as the reformation of social practices, in which multicultural groups are both the facilitator and the consequence of the participants' conduct. The crux of this study is linked to the production and reproduction of cross-cultural interactions, and the results revealed that new structures had been produced, which may be as a result of the implementation of a digital game.

Participants from Phase 1 (84.8%) and Phase 2 (84.6%) positively indicated that they had learnt from their new team members. In addition, there was a strong indication that the participants in this study perceived the digital game to be a valuable learning tool. Therefore, cross-cultural construction of knowledge is evident, as the students admitted to having learnt something from their new team members while playing the digital game. Besides, 76.1% of the participants from Cohort 2013 and 72.5% from Cohort 2014 indicated that the digital game was an effective way to learn, therefore, a new perception of learning was produced.

6.3.6. Participants revealed the following about their group's study preferences specifically with regard to cross-cultural engagement and learning preferences after engaging in the intervention

Table 6.4: Interaction and engagement preferences following digital game intervention

	Phase 1 (N=46)					Phase 2 (N=43)				
%	SA	A	U	D	SD	SA	A	U	D	SD
In lectures I often sit with students from my own social-cultural group and religious beliefs	9.8	41.5	22	7.3	19.5	17.9	23.1	12.8	35.9	10.3
I feel uncomfortable sitting with classmates outside my social-cultural group and religious beliefs	9.8	14.6	12.2	26.8	36.6	5.3	15.8	10.5	36.8	31.6

During this module, I sat with a group from the different social-cultural group	27.5	27.5	27.5	5	12.5	23.1	25.6	17.9	28.2	5.1
I wish we could have more discussions in class	19.5	41.5	29.31	4.9	4.9	15.4	38.5	28.2	17.9	0
Reflection is an important part of learning	34.1	46.3	14.6	2.4	2.4	23.1	43.6	20.5	7.7	5.1
I struggle to apply theory to practical situations	9.8	22	22	34.1	12.2	10.3	12.8	12.8	59	5.1
When I don't understand something, I ask the people sitting around me	17.1	56.1	12.2	4.9	9.8	15.4	53.8	7.7	17.9	5.1

* SA= Strongly Agree; A=Agree; U=Uncertain; D=Disagree; SD=Strongly Disagree

Table 6.4 indicates the participants' responses to their levels of interaction in the classroom regarding their interaction with students from the same and different socio-cultural backgrounds, the ability to apply theory to practical situations, reflective learning, as well as how they deal with the sharing of information in the classroom.

The majority of students in both cohorts indicated that in lectures, they usually sat with students from their own socio-cultural backgrounds and religious beliefs. Therefore, 51.3% from Phase 1 and 41% from Phase 2 confirmed the convictions of this study regarding cultural clustering. However, during this intervention, more participants from Phase 1 (55%) and Phase 2 (48.7%) reported that they had sat among students from different socio-cultural backgrounds, suggesting that the methodological approach to randomisation was effective. It also suggested that the routinization of everyday interactions, as highlighted by Giddens (1984), developed ontological security (trust) in participants, which is necessary for meaningful social interaction.

Sixty-one per cent (61%) of participants from Phase 1 and 50.9% from Phase 2 indicated that they would prefer more discussions in the classroom. In addition, the majority of students from both cohorts acknowledged the importance of reflective learning in education, with 80.9% from Phase 1 and 66.7% from Phase 2 agreeing.
The participants in this study also revealed that they were able to apply theory to practice, and when they did not understand the module content, they were comfortable to ask the peers 'sitting around' them. Therefore, if they were sitting in their cultural groups, the

knowledge would only have been generated in those groups, which has negative consequences for the construction of knowledge, as anything learnt would be contained within cultural cluster groups, and not shared across groups in the classroom.

6.3.7. Given the low experience of editing Wikipedia pages, and contributing blog posts, as per Figure 6.2, the participants from Cohort 2014 were assigned a task, using authentic learning principles on a wiki platform. Students were also required to contribute to a blog.

Table 6.5 illustrates the mean scores of the responses of the participants from both Cohorts.

Table 6.5: Authenticity of a Wiki-based task

Authenticity of wiki based task	N	M	SD
Represented real world activity	39	2.33	1.155
Wiki activity was motivating	39	2.23	1.111
Online blog allowed for reflection	39	2.46	1.072
Feedback from peers allowed for improvement of final product	39	2.21	1.031
Length of time to complete wiki activity was sufficient	39	2.18	1.097
Felt anxious to start the wiki	39	2.38	1.184
Felt confident using wiki tool	39	2.38	1.184
Wiki activity was interesting and motivating	39	2.38	1.184
Learnt from others doing wiki activity	39	2.15	1.089
Wiki activity made it easy to edit assignment	39	2.44	1.231
Wiki task was stressful	39	2.23	1.224
TOTAL	**39**	**2.3074**	**.78628**

Table 6.5 above illustrates the mean scores of the post-intervention activity of the participants regarding their usage of a wiki in the classroom. Generally, the mean scores are indicative that the majority of the participants agreed on the authenticity of the wiki task and the use of the blog as another tool that mediated learning, as well as their experiences with both tools. Consequently, the mean scores across this range of questions are between 2.15 and 2.46, which indicates general agreement regarding the principles

of authentic leaning, highlighted in Chapter 2. Based on the total standard deviation, the distribution of the score is narrow and close to, the total mean score. This data offers insight into the cross-cultural interactions that occur in diverse, online cultural settings.

Regarding the four research questions posed at the beginning of this chapter, the findings of the Section One and Section Two of this chapter highlight the following:

- With reference to how prior experience may have informed cross-cultural engagement, using digital games, it is evident that the participants predominantly used social networking applications to study. It appears to be a dominant practice across both cohorts. The familiarity of online social interaction suggests that they are social learners and that these social actions inform how they interact with one another. It is also indicative that they bring these experiences into the classroom, which highlights the social-constructivist nature of the learning environment. However, with many of the social networking applications, such as wikis, blogs and YouTube, the participants were inclined to use the tools to gather information, but did not contribute to these platforms. This indicates limited interaction, which suggests that this is not a regular social action taken by participants. While a large majority of participants engaged in console games, very few played digital games, prior to this intervention. The results of prior knowledge and experience of digital games for African participants demonstrate that they are at a distinct disadvantage to the knowledge and experience of their peers, as fewer of them played digital games, compared with their peers.
- The way the use of digital games fostered cross-cultural interaction show that they preferred to use the game to prepare for a test, as oppose to studying with their peers. Many used the game to prepare for tests and to revise their work. The findings show that the digital game fostered cross-cultural interaction that would transcend this study, as they were willing to interact with the same group in the future. This shows that there was a reproduction of social actions, may have been as a result of the implementation of the digital game. Furthermore, in a social constructivist learning environment, a large majority of the participants stated that they had learnt something from their new peers; therefore, highlighting that knowledge was constructed through cross-cultural interaction.
- With reference to how cross-cultural clusters engage with one another using digital games; the findings in this section show that the participants enjoyed working in

random groups. While more than half of the participants indicated that they usually sat with peers from the same socio-cultural group, however, they felt comfortable in doing so. This suggests that the dominant practice of cultural clustering is evident and that this action informs group actions, thereby, amplifying structures of signification. Additionally, they cleared concepts that they were unclear about with peers in their surrounding seating space, which highlights that knowledge is produced in cultural clusters.

- Lastly, the implementation of a digital facilitated face-to-face cross-cultural interaction, the participants indicated that they had learnt from their peers, therefore, fostering a social-constructivist learning environment.

The section that follows presents the comparative analysis of classroom engagement and learning in online spaces.

6.4. Section Three: Differences in classroom engagement and learning

In this section, an analysis of the data following comparisons of the baseline data and the post-intervention data is presented. Therefore, a Repeated Measures ANOVA was conducted. Typically, Repeated Measures ANOVA's are conducted to detect whether there are differences between related means in a set of data over a period. A Repeated-Measures ANOVA was applied, using the pre- and post-questionnaire average scores as the dependent variable, and examining the differences:

1) Between the two cohorts (2013 and 2014);
2) Between the pre-and post-intervention time-points of the same cohort; and
3) Between the pre- intervention time-points, across cohorts.

These analyses repeated the average scores from the CLASSE component/scale, students' study preferences and their perceptions about working in online spaces (Appendices A-D). These scales were the only questions asked at all quantitative data collection time-points in both Phases. These scores were used to construct the average scores, ensuring that the derived variables were comparable. The purpose of this analysis was to answer research question (ii), 'In what way does the use of emerging technologies facilitate cross-cultural engagement in the sport studies classroom?'

6.4.1. Level of Engagement

This score comprised the mean of 13 questions asked in all four questionnaires. Table 6.6 presents the descriptive statistics for this score**:**

Table 6.6: Mean scores for level of engagement for Phase 1 and Phase 2

Time	Phase 1		Phase 2	
	Mean	**95% CI**	**Mean**	**95% CI**
Pre-module	2.34	2.18 – 2.49	2.49	2.30 – 2.67
Post-module	2.28	2.13 – 2.44	2.43	2.24 – 2.61

Table 6.6 indicates that participants from Phase 1 expressed slightly higher engagement scores before and after the digital game intervention compared to that of their counterparts in Phase 2. It also shows that the level of engagement score decreased from the pre- to the post- time-point. Due to the scoring of the instrument, lower numbers, mean a higher level of agreement. However, there was an increase in engagement levels between before and after the intervention for the participants in both phases, but this was not significant. This suggests that the use of the digital game may have positively affected engagement. Given that the participants were randomised, it can be inferred that the implementation of a digital game, improved cross-cultural engagement. The results of the Repeated-Measures ANOVA are shown below:

Table 6.7: Repeated measures scores between cohorts pre and post intervention

Effect	F statistic (d.f.)	p-value
Diff between cohorts	2.054 (1,62)	0.157
Change from pre to post	0.766 (1, 62)	0.385
Diff in change between cohorts	0.006 (1,62)	0.940

Table 6.7 indicates that there was no significant difference between the 2013 (Phase 1) and 2014 (Phase 2) cohorts [$F(1,62)=2.054, p=0.157$] in their level of engagement. Additionally, level of engagement did not significantly change over the course of the module [$F(1,62)=0.006, p=0.940$], even after introducing a digital game, a wiki and a blog. Similarly, the change from pre- to post-intervention was of the same magnitude

[F(1,62)=0.766,p=0.385] in Phase 1 and Phase 2. This means that the introduction of a digital game, a wiki and a blog did not have an effect on classroom engagement. While cross-cultural engagement was not measured on this scale, this finding should be viewed in light of the qualitative findings, which suggest otherwise, as it does not fully answer the research question, 'In what way does the use of emerging technologies facilitate cross-cultural engagement in the sport studies classroom?' However, given the importance of student engagement for student success, this finding is of importance for pedagogical application of digital games, wikis and blogs in the classroom. This scale was a standardised measure based on Strydom, Mentz and Kuh's (2010) Classroom Survey for Student Engagement (CLASSE), which does not account for cross-cultural engagement as mentioned in Chapter 1.

6.4.2. Learning Preferences

For the purpose of this study, study preferences took into account whether students used the internet to study and which study methods they perceived to be best for their learning. It also accounted for study preferences of group work and classroom activities (for example, sitting with the same socio-cultural group, classroom discussions, reflection, application of theory and practice, lecturer interaction.) that facilitated learning. Table 6.8 presents descriptive statistics for this score.

Table 6.8: Differences in learning preferences of Cohort 2013 and Cohort 2014 pre and post-intervention

Time	Phase 1		Phase 2	
	Mean	95% CI	Mean	95% CI
Pre-module	2.97	2.79 – 3.14	2.86	2.66 – 3.06
Post-module	2.94	2.74 – 3.15	3.08	2.85 – 3.31

Table 6.8 shows that the learning preferences score of 2.94 was lower in Phase 1 and higher in Phase 2 (3.08) after the intervention. This means that their scores on their preferences for learning related to seating arrangements, classroom discussion, reflection, application of theory and practice and lecturer interaction ranged between agreement and uncertainty. The scores from Phase 1 decreased for pre- and post-

intervention. The scores dropped from 2.97 to 2.94 points. Due to the scoring of the scales, statistically, this means that there was a slight increase in learning preferences of participants in Phase 1. In Phase 2, however, there was an increase in pre- to post- scores; an increase from 2.86 to 3.08. This means that there was a decrease in learning preferences from being in agreement to being uncertain. In other words, participants in Phase 1 of this study's score decrease from pre-to-post, indicating that there was an increase, albeit not significant, in their learning preferences. However, Cohort 2014 that participated in Phase 2, observed a higher post-intervention score, suggesting that their learning preferences were lower after the intervention and that they may have regressed, because of the intervention. There may have also been a learning effect, when completing the post-intervention instrument for both cohorts. The results of the repeated-measures ANOVA are shown in Table 6.9.

Table 6.9: Effect of learning preferences between cohorts

Effect	F statistic (d.f.)	p-value
Diff between cohorts	0.021 (1,59)	0.886
Change from pre to post	1.329 (1, 59)	0.254
Diff in change between cohorts	1.940 (1,59)	0.169

Table 6.9 indicates that there was no significant difference between Phase 1 and Phase 2 [$F(1,59) = 0.021, p = 0.886$], regarding the participants' learning preferences, which did not significantly change over the course of the module [$F(1,59) = 1.329, p = 0.254$]. Similarly, the change from pre- to post- was of the same magnitude in the 2013 and 2014 cohorts.

6.4.3. Working Online

For the purpose of this study, working online took into account how participants reported their experiences when they were working online. On a 10-point analogue scale, it took into account their level of confidence, when working online, online sharing, use of new tools and learning, while using the internet. Table 6.10 presents descriptive statistics for this score.

Table 6.10: Differences in working online of Phase 1 and Phase 2 pre- and post-intervention

Time	Phase 1		Phase 2	
	Mean	95% CI	Mean	95% CI
Pre-module	3.85	3.21 – 4.48	3.47	2.73 – 4.21
Post-module	3.42	2.91 – 3.93	3.01	2.42 – 3.60

Table 6.10 shows that there was a decrease in the score for working online between Phase 1 and Phase 2 pre- and post- test scores. This meant: that there was an improvement in the participants' confidence, while working online, during this module; that they enjoyed online sharing more than what they did prior to this intervention; that they were more excited about using new online tools; and that they wanted to learn more about the internet. While the mean scores dropped from pre- to post- by a similar amount in both cohorts, there was a marginally larger difference for Phase 2 of 0.03 points. The results of the repeated-measures ANOVA are shown below:

Table 6.11: Effect of working online between Phases

Effect	F statistic (d.f.)	p-value
Diff between cohorts	1.170 (1,57)	0.284
Change from pre to post	3.167 (1, 57)	0.080
Diff in change between cohorts	0.005 (1,57)	0.947

Table 6.11 shows that there was no significant difference between the 2013 (Phase 1) and 2014 (Phase 2) cohorts in their online work ethic [$F(1,57)=1.170, p=0.284$], and that working online did not significantly change over the course of the module [$F(1,57)=0.005, p=0.947$]. Similarly, the change from pre- to post- was of the same magnitude in the 2013 and 2014 cohorts [$F(1,57)=3.167, p=0.080$].

The largest effect observed in this table, although not statistically significant, was a change from pre-module to post-module. The score changed by 0.43 points in 2013, and 0.46 points in 2014, on a 10-point scale. This may be due to the implementation of a variety of online tools, used in the interventions for this study. The use of the online tools had a positive effect on students' confidence, online sharing practices, excitement using new tools and their willingness to learn more about the internet.

6.5. Summary of Quantitative Findings

A summary of the quantitative results and a brief discussion follows in this section. This discussion will be further expounded in Chapter 7 of this thesis and interpreted through the lens of Giddens' Structuration Theory. The researcher attempted to answer the following research questions in this chapter:

- 'How does student's prior educational experience inform cross-cultural interaction using digital games?'
- 'In what way does the use of emerging technologies facilitate cross-cultural engagement in the sport studies classroom?'
- 'How do cultural clusters engage with each other across cultural settings, while using digital games?' and
- 'How does the implementation of emerging technologies affect interactions in face to face cross-cultural engagements in the classroom?'

The data were intentionally collected in order to examine the structures that exist at the level of interaction, especially during the pre-intervention questionnaires. These will be further discussed and uncovered in Chapter 7. The post-intervention surveys were used to determine whether there was a difference in interaction and whether the interactive structures were transformed, because of the intervention.

The summary below relates to data that aimed to answer these questions.

- In Section 6.2, the demographic information shows a higher percentage of male participants, than female. This may indicate a gender bias in the findings; however, this is the nature of the sport studies classroom at the higher education institution under study. Cross tabulations on the demographic variables also show that females, African and Indian students have proportionately lower incidences of engaging in game-playing activities. Therefore, the prior experience with emerging technologies is marginal for historically disadvantaged groups. This informs their prior knowledge and experience when entering the sport studies classroom. Therefore, the interaction with digital games in the classroom is based on individual use, which informs the prior interactions and experiences that participants bring into the classroom.
- Students' interaction on social networking sites may be indicative of the affinity for social learning. However, the interaction in some of these spaces was minimal, with

small numbers of participants in both Phases interacting with tools in a unique way. However, Section Two of this chapter showed that the rules/structures of signification are activated in terms of how participants make sense of the tools they use. These social networking tools are impacted by social practices ordered across space and time and, therefore, if the dominant social practice is not to edit and not to upload content, then the status quo would remain and students would reinforce the existing social system. Furthermore, linked to the affordances of emerging technology tools (Bower, 2008), the low reporting on some of the social networking tools suggests that social interaction on social networking sites may not be the regular social practice in the social system.

- Section One of this chapter also reflected the inequities linked to African students' access to digital games, as this ethnicity group engaged in digital games, the least. This may be linked to legacies of a segregated system, where some groups had advantages over others, which includes the use of, and access to, digital games. Africans, particularly, were the most disenfranchised. The results show that more participants in Phase 1 played educational and console games than those in Phase 2. This means that their exposure and prior experience with console and educational games may put participants from Phase 1 at an advantage over their succeeding cohort. The lack of exposure to educational games further affirms the inclusion of a wiki and a blog in Phase 2, as per the research design.

- The findings of the analysis of this study indicate that the participants had positive experiences with regard to group work, despite not engaging with group members prior to the gamification intervention (Figure 6.2). The focus of this study is on the production and reproduction of cross-cultural interaction and the results offer evidence to suggest that the use of digital games created conditions for transformation of structures (improve cross-cultural interaction), which are bound by the rules and resources (digital game) as structural properties (randomisation). Therefore, there was a production of new rules and resources within the social system. This will be further explored in Chapter 7. In addition, regarding the nature of cross-cultural interaction and engagement preferences (Table 6.4), the results show that during lectures, students sat with peers from homogeneous groups. This supports the assertions made in this study about cultural clusters existing in the classroom. However, by engaging in this particular module, the participants reported that they sat with a different cultural group, suggesting that randomisation induced cross-cultural interactions, and may have

modified structures embedded in social systems that inform students' roles and the meaning they give to seating preferences. This will be further explored in Chapter 7 of this thesis.

- Section Two presented data within the constructivist paradigm; the participants were of the opinion that they had learnt something new from their new peers. Therefore, the construction of knowledge happened through cross-cultural interactions, as there were strong indications that students learnt something new from peers, in the process, generating new knowledge. There is a wider and higher range on interaction amongst participants in the classroom.
- Section Three offered the statistical findings with regard to levels of classroom engagement, experiences of working online and learning preferences of students who participated in this study. The findings suggest that there is no significant difference in levels of engagement, experiences of working online and learning preferences between the cohorts, who participated in this study. The reason for the lack of significant changes in scores may be the self-reporting biasness on the part of the participant. There may also have been a learning effect, when completing the questionnaire. While this may be new emerging technologies to the participants, working online and their study preferences may not have changed, because of the interventions in this study. As knowledgeable agents, participants may still have been adopting their old study preferences outside of the classroom environment, therefore indicating that their actions are bound in consciousness. Giddens (1984) also contends that people follow rules patterned in social structure. The findings of this set of data should not be interpreted in isolation and should be interpreted alongside the qualitative data that was offered in Chapter 5.

The following chapter comprises the discussion of the results.

CHAPTER SEVEN

DISCUSSION

7.1. Introduction

Even though this study found that students from different cultural backgrounds retain a sense of agency, the existing structures inhibit them interacting as a class. The discussion in this chapter is centred on the different agencies (which will be examined here) and structures that have been identified in the current study. The students produced particular agencies such as, independent decision making, communication skills, learning digital skills, confidence, building relationships, seeking out knowledgeable others and interaction. However, these agencies are inhibited by the following structures (some existing): group composition; cultural clustering; seating preferences; feelings of inferiority; prior experience; lack of confidence; and fear of compromised marks. In this chapter, the researcher examines the interplay between these different agencies and structures, based on the findings presented in Chapter 5 and Chapter 6. The main findings of this study reveal that there are particular social practices, such was seating preferences, cross-cultural engagement and playing the digital game in randomised classroom groups that inform the participants' understanding of the roles they assume, when entering the classroom. There is evidence that they abide by the dominant norms of engaging with particular groups (Section 5.2.1 and Section 5.2.2), which may or may not be culturally based, and justifying it for the advancement of their own learning (Section 5.2.1 and Section 5.2.2). The implications of randomising the classroom and introducing emerging technologies in the classroom, as revealed in the findings, reshaped the participants' interactions with the various groups in the classroom, and disrupted the normal routine with which they were familiar (Section 5.2.2.1). This also created an opportunity to uncover structures that allowed a discussion on the structure-agency relationship using the dimensions of duality of structure. The implication of these dimensions will be discussed further in this chapter.

This section will be presented as three sections, which are aligned with the dimensions of duality of structure that inform the development of the social-constructivist game-based learning model. Section 1 is a discussion of the actions that inform the production and reproduction of cross-cultural interaction. Section 2 is a discussion of the structures that facilitates the production and reproduction of cross-cultural interactions, and Section 3 is a

discussion of the structures that have been produced or reproduced within the social system. These discussions are offered in the light of themes that emerged from the thematic analysis conducted in this study. All the responses are elaborated on and compared to the literature related to a specific theme. The researcher also presents insights based on self-reflexivity.

7.2. Section One: Cross-cultural interactions

Cross-cultural interaction in the classroom is discussed as a social institution in this section. The discussion relates to seating preferences and how the choices related to seating preferences are produced or reproduced, as well as its impact on cross-cultural interaction. This is followed by levels of engagement in the classroom and the effects thereof on cross-cultural interaction. Additionally, the link between interaction and engagement, as well as the group activities, while using a digital game, are explored. The researcher presents this discussion through the three dimensions of the duality of structure (Giddens, 1984).

7.2.1. Group composition/Cliques – engaging with peers

Giddens (2009) indicates that it is common for one ethnic group to occupy power over another, in which case group closure, such as cultural clustering, coincides with resource allocation. This is indicative of the facilities that allocated resources in the duality of structure to reproduce structures of domination. Baab (2012) highlights that group composition presented challenges related to individual levels of contribution, grading, project management and the way groups are assembled. Groups are an integral part of society (Carabajal, LaPointe & Gunawardena, 2003).

As knowledgeable agents, students act out social practices that have negative implications for cross-cultural, by unintentionally forming cultural cliques. The unconscious and unacknowledged conditions that influence group social actions in the sport studies classroom, has had unintended and negative consequences for social interaction, and, consequently, cross-cultural engagement. Similarly, Jones and Karsten (2003) assert that knowledgeable agents' actions are bound by unconscious and unacknowledged conditions, which result in unintended consequences of said action (See Table 2.1). However, their understanding of social practices may be limited and they may only offer partial explanation for their actions. While there is an indication that cultural clustering is unintentional, evidence presented in Section 5.2.1.3 show that their social

actions are also informed by independent choices of group composition. The fear of compromised marks highlight how sanctions, linked to the unarticulated rules about the norms that inform social interaction, consequently, reproduces structures of legitimation. Giddens (1987) posits that human beings normally do not know what they are doing in that moment, but why they are doing it. Therefore, the agency demonstrated by the participants reveal that they, independently, make decisions to form homogeneous groups, as it has consequences for more meaningful interaction for some participants. The results are supported quantitatively with evidence that students sit with other students from their own cultural backgrounds (See Table 6.4). This implies that they will seek out knowledgeable others, who are in the same socio-cultural groupings, and whose capabilities they deem to know. This, however, also means that weaker students may not have the benefit of learning from other, more knowledgeable students in the class, if the cultural clustering is to continue. Therefore, the way that students allocate resources, such as group attributes, iteratively produce structures of legitimation, as it determines what can be sanctioned, such as lack of learning from knowledgeable others.

In addition, the contradictory affirmations that while students do not intentionally create homogeneous groups, they draw of selective processes linked to the attributes of their peers. This complexity in the social interactions has serious implications for cross-cultural engagement. Should this line of reasoning continue, and should the conditions of the classroom not be disrupted, cross-cultural interactions will be hindered as an unintended consequence of social actions. Giddens (1984) contends that social structures are both the condition and the outcome of individuals' activities and the one cannot exist without the other. Therefore, social practices will be reproduced, and cross-cultural interactions will be constrained, because of structures that inhibit cross-cultural interaction. Conversely, the positive agency evoked because of group randomisation shows the value of this intervention, as students were able to get to know their peers. This finding should be considered in the light of Table 6.4, which offers insight into cross-cultural interaction, prior to the intervention, showing that they were previously unfamiliar with their group members. There appears to be minimal cross-cultural engagement, however, as the information obtained quantitatively and qualitatively reveal that the positive shift in cross-cultural interactions was achieved through a deliberate intention to disrupt the social phenomena of group cultural clustering. One of the considerations of choosing games for leaning includes attention to student group and size

(Pivec, 2007). The randomisation of groups, therefore, allowed for a shift in cross-cultural interaction, through thoughtful allocation of groups. This type of intervention may advance teaching approaches of cross-cultural construction of knowledge in an emerging technologies space. Additionally, the fact that they are subconsciously working in groups that represent their own culture is indicative of the interactions, both consciously and sub-consciously, that shape the mental traces/structures, which are in existence.

Therefore, the structures of signification, domination and legitimation are evident in the way their social grouping systems are produced and reinforced and/or reproduced at the level of interaction. Structures of signification, related to how students give meaning to their group composition through their perception of their roles in their socio-cultural groupings, is determined by how they work together with others in the group. The attributes of groups are important to students, as noted by Liddell (2002), who indicates that the way cultural groups manage risk, varies in accordance with the outcomes or human agency. This dominant norm, the homogeneous group composition, also yields power within the structure, because it would affect the outcomes of projects, based on the strengths and weaknesses of the group, thereby amplifying structures of legitimation. While the sanctions for these groups may be linked to how students work together, the overall repercussion of such behaviour may lead to inappropriate and disproportionate learning opportunities for those outside of stronger groups, thereby inhibiting cross-cultural engagement. The mental and emotional weight placed on interaction should be considered, as they would feel excluded if they were not part of a team. Daily pursuits of social practices are routinized, which tends to reproduce social structures. The routine of students is psychologically lined (Jones & Karsten, 2008) suggesting that unconscious sources of anxiety are minimised by students in their social practices of choosing peers.

7.2.2. Seating preferences

The findings suggest that participants in this study require acknowledgment and acceptance (See Section 5.2.1.1) when deciding on where to sit. One could argue that the participants, who suggest that '*no one wants to be alone*', suffer from self-confidence issues and prefer validation from other members, so as not to feel alone and alienated. However, from a Structuration Theory perspective, the agency exhibited by students, who do not appear to be independent learners, displays how structures of legitimation are

iteratively reproduced. Being 'alone' appears to be an inappropriate behaviour and is out of the norm. This may affect the students' understanding of the unarticulated rules about being alone and, therefore, they do not want to be sanctioned. In addition, the concept of self-confidence (structures of domination), is also raised regarding the benefits of digital games in a randomised group, which is further discussed in Section Two of this chapter. Self-confidence is achieved through wielding power by exploiting the resources. Access to authoritative resources, using facilities, such as the digital game, produced new structures of domination. Tucker (1998) highlights that rules and resources are regarded as a medium, through which social life is produced and reproduced by social activity. This is affirmed by the social actions of students, who, as Giddens (1984) asserts, are rule following, the outcome of which is shaped by differences in power and resources that people have at their disposal. This is critical to the duality of structure. If the inverse is considered, it can be assumed that without the deliberate randomisation, the lack of confidence, therefore, produces structures that may impede cross-cultural interaction.

Seating preferences are also associated with whether or not participants feel comfortable in the classroom. It is premised that students choose their classroom seating independently, thereby, exercising agency. However, this social action is linked to whom they know, and the level of acknowledgement from peers. Therefore, their level of comfort is linked to structural elements that reinforce their interaction patterns with peers in the same group. This suggests that there is a collective understanding in groups, which consequently implies that, through practical consciousness (Giddens, 1984; Tucker, 1998), students' unarticulated beliefs and knowledge about their group, as well as the role their group and its members play are used to interpret their actions. Therefore, drawing on interpretive schemes, these actions reinforce structures of signification. This, however, begs the question as to how they will be able to become comfortable with their peers, if there are large numbers of students who have not interacted with peers previously, as shown in Figure 6.2. While self-confidence is important, the effect of social practices that are observed through seating preferences hinders cross-cultural interaction by students, who are knowledgeable agents. Therefore, when students do not feel the acknowledgement and acceptance, it may influence their self-confidence and have an indirect effect on interaction, or agency, which, in turn, would have an effect on cross-cultural engagement. In such cases, social agents in the classroom (students) will align themselves with peers, who may display common interests. At a level of interaction,

the manner in which students develop and cultivate a comfortable relationship, when they are sitting in groups, currently reflect the cultural groups' presence in society. Therefore, the traces of a segregated system may have had an even bigger impact on the minds of students, evidenced by an indirect effect on their levels of self-confidence and ultimately amplifying structures of domination. The findings of this study are consistent with Ravjee *et al.* (2010), who report that students have grown accustomed to more homogeneous learning environments over several years and, therefore, there is a lack of engagement with people outside their ethnic and/race groups. This affirms the anecdotal observations of the researcher, prior to investigating the phenomena presented in this study.

The participants were of the opinion that they needed to relate to the classmates they sat close to in the classroom. While the participants denounced that it was '*not about colour*', meaning ethnicity, there were some observations made about cultural cliques in the classroom (Section 5.2.1.3). However, when considering the group preferences as discussed in Section 7.2.1, there are contradictory 'rules', which are embedded in the consciousness of students. On the one hand, there are claims of unintentional cultural clustering, while on the other, there is evidence to suggest that clustering is done through a systematic process. These actions reside beneath the consciousness of students, which implicate their day-to-day actions. Giddens (1984) ties the unconscious to what he calls memory/mental traces. While cultural clustering may be unintentional, it is clear that students, autonomously, entered into a position by their own volition, and possess the agency to adapt and transform the 'rules', by which these decisions are made, thereby activating structures of legitimation. Rules are not abstract and are only constituted through action (Tucker, 1998; Giddens, 1979). Giddens believes that, through reflexive monitoring, people rationalise their social conduct (Tucker 1998), which accounts of their behaviour (in this case cultural clustering), and draw on shared cultural stocks of knowledge that is used in the reproduction of their actions. Therefore, students draw on resources embedded in facilities, which are embedded in the group, to reproduce structures of domination. Therefore, in addressing the research question, 'What mental traces enable or constrain cross-cultural interactions in sport studies?' it is apparent that the configuration of mental traces, in this instance, is indirectly linked to culture. The fact that students are able to give reasons for their actions supports Giddens' notion that people invariably develop knowledge about why they engage in particular practices. They may not be aware of what they are doing, but they do know why they are doing it.

Furthermore, students place 'conditions' that govern social interaction through resources, or attributes, that their peers bring to the classroom (i.e. strengths). These interactions/structures allow for the continuation of social actions ('to stick together'), which is further compounded by their seating preferences. This study revealed that participants also sat with peers who live in the same suburb, echoing the sentiments of Ravjee *et al.* (2010), who assert that some students form close bonds with people they meet at university, as well as those who study in the same field, or live in the same suburb and/or with whom they would travel. However, what needs to be taken into consideration is that the suburb students come from is also a reflection of the historical legacy of the Group Areas Act, which required people of different ethnicities to move to demarcated areas, in which they were allowed to reside. Much of this is still evident today.

The findings reveal that the clustering of students into groups hinders cross-cultural interaction, as well as the collaborative construction of knowledge across-cultural groups in the classroom. Besides, they did not create the conditions that existed because of mental/memory traces, which transform their situation out of their own volition, thereby recursively reproducing dominant social norms. Giddens (1984) asserts that social conventions are important to producing social life. Thus, in line with this reasoning, the conditions that inform the social activities in the classroom may seem simple to students, however, they are extremely complex and require a certain amount of culturally specific knowledge (Giddens, 1984).

7.2.3. Interaction and engagement preferences following digital game intervention

Students, who sit with students from their own socio-cultural background in the classroom, are comfortable sitting with classmates outside of their own social cultural backgrounds and religious beliefs (See Table 6.4). If this is the case, then the question remains as to why participants in this study would prefer to sit with others from their own socio-cultural background. The evidence suggests that more than half of the participants agreed that they would often sit with other students from their own socio-cultural background (See Table 6.4.). These social practices, drawn from mental traces, impede cross-cultural interaction and the structures that exist, manifests in their propensity to organize themselves into cultural groups. The CHE (2010, p. 40) purports that culture is 'historical and specific' and reflects the way in which social groups are organised in society. Therefore, this means that the academia needs to make better use of opportunities

provided for rich interaction in a diverse cultural setting. If the academic project is unable to achieve this, it will be a missed opportunity to exploit the richness of diversity to mediate engagement in a diverse classroom setting. Ravjee *et al.* (2010) reports on the cultural policies of equitable access, where the complexity of social relationships is highlighted.

Students interacted with peers from different social cultural backgrounds during this study, which highlights the strengths of the social constructivist approach in relation to learning through active engagement and meaningful activity, as highlighted by Wilson (2011). This may have positive implications for access to education by historically disadvantaged groups, because of redress policies on access for Black and female students across public universities. Consequently, the number of African, Coloured and Indian students has increased from 55% to 80% (Sehoole, 2012). In addition, Lawrence (2005) recognises that the differences in identity and affiliation, in terms of gender, ethnicity, generation and sexual orientation, exist within higher education. Therefore, the diverse groupings a student may belong to; reinforce the complexity in the student profile (Lawrence, 2005). This notion is echoed in the observed findings of this current study, where students preferred sitting with students from their own socio-cultural background. However, because of a gamified space, participants were willing to shift their socio-cultural preferences in the learning environment, thereby transforming structures of signification (their understanding of roles in the classroom); domination (how they draw on elicit resources to exercise power); and legitimation (appropriate behaviour/interaction). For both cohorts in this study, the social-constructivist learning environment created a meaningful space to uncover practices of cross-cultural interaction and engagement, bearing in mind that the majority of participants did not interact with a different group prior to this study. Because of this intervention, various structures and agencies were uncovered, which either enabled, or constrained, cross-cultural interactions, as presented in this section. The pedagogical implication shows that a large majority of the participants indicated that they were likely to interact with a similar group in the future. This is a positive finding for future cross-cultural engagement. Therefore, when addressing research question number six, 'How does the implementation of emerging technologies affect interactions of face-to-face cross-cultural engagements in the classroom?', it is evident that, in their willingness to interact with similar groups in

the future, the students in higher education have the power and capability to transform structures, which may lead to better cross-cultural interaction.

The implementation of a digital game created suitable conditions, which allowed for the production and reproduction of structures that allowed interactions of cross-cultural engagement. The power/affordances of emerging technology tools shifted the repetitive nature of student interactions over a period. Lawrence (2005) argues that when addressing diversity in higher education, cognisance need to be taken of the broadening understanding of diversity. This author adds that for any cohort diversity issues could include gender, school experience, and liability status and attendance type. Giddens avers that cultures are largely non-discursive, as mutual knowledge informs the 'methods' used by lay actors to generate practices, which constitute everyday life (Taylor, 1998); put differently, people are able to follow and participate in conversations, due to a variety of social conventions, without being explicitly discursive.

Regarding class discussions, more than half of the participants in both cohorts indicated that they would prefer more discussions in the classroom. Discussion is linked to communication. In the classroom, English is used as a medium of instruction. Giddens, along with Bourdieu, share the practical view that language is the key means, through which people address their social problems (Tucker, 1998). Therefore, it can be inferred that their preference for class discussions is linked to structures of signification. Students understand what they want and this is indicative of their knowledgeability as agents. Giddens (1984) sees the link between structure and agency (the reproduction of society), as a practical activity concerning the on-going accomplishment of what needs to be done; put differently, for social life to continue (Tucker, 1998). Therefore, agents draw on interpretive schemes, such as classroom discussions, through an activity of communication, and reproduces the social structure as signification. Since a large proportion of students indicated that class discussions would be preferred, it can be deduced that there is a collective understanding among class members, and, therefore, emphasizing structures of signification. In addition, constructivists learning environments seeks to integrate emotion, and allow for engagement into discussions of learning. This also affirms that technology does not replace personal discussion in a physical space, and that the resources available to students may not necessarily bring about meaningful change in structures. Jones and Karsten (2003) aver that, implementing

the use of material resources, such as technology, may influence social practices, however, only through incorporation into the processes of structuration, such as rules. Such rules are never fixed, implying that their ideas and perceptions about classroom activities, such as classroom discussions that are constituted through social action, as emphasised by Giddens (1984). For students to know the rules linked to class discussions, as well as what they do during those activities, shows that these rules are widely used and sanctioned. Therefore, in students' development of agency, they are able to engage in class discussions, but are aware of the implications, thereby activating structures of legitimation, through their social interactions. Chuang (2015) noted that group discussions help students to learn better, understand subject matter quicker and become more engaged in class. Interestingly, Rowe, Frantz and Bozalek (2013) advise that, when applying tool mediated teaching, a preference for deferring content into technological spaces may allow for discussion in the classroom. In addition, the importance of allowing active discussions in class is linked to one of the five benchmarks for effective educational practice for student engagement, namely, active and collaborative learning (CHE, 2010). It refers, therefore, to the extent to which students are active in class, through discussion, questions or presentation, and engaged in out-of-class discussions with others (Strydom, Mentz & Kuh, 2010). This is one of the critical engagement factors for student success in South African Higher Education.

The importance of reflective learning is acknowledged through evidence of learning in social-constructivist authentic learning practices, as presented in Section 5.2.2.1, which revealed that students were reflective and able to reason within a social learning context. In addition, the participants were able to give meaning to the content and interaction with their peers, which is indicative of a social-constructivist learning environment. The importance of reflection was further supported by the quantitative results (See Table 6.4). Reflection fulfils several functions, which include making meaning in complex situations and learning from experience. However, it is also important to note that reflection does not occur in all situations; the process appears to be stimulated by complex problems. Both on and during the experience, it appears that the anticipation of challenging situations also stimulates reflection (Mann, Gordon & MacLeod, 2009).

Of importance to this current study, is the manner in which Edwards (2007) interprets reflection as being concerned with how consciously the one reflecting takes account of

the wider historic, cultural and political values and beliefs, in framing and reframing practical problems, to which solutions are being sort. This type of critical reflection was required, when completing the authentically designed wiki task, which students had to undertake. For sport studies, reflection is a form of technical knowledge that may lead to new knowledge, which supports Wilson's (2011) summations on the strengths of social constructivism. It occurs best when it begins with the experience of sport studies practitioners, as they are technologically assisted in the process of describing, informing, confronting and reconstructing theories of practice (Edwards, 2007). The findings of this current study echo the sentiments expressed by Rowe, Frantz and Bozalek (2013) who assert that if the effective integration of technology into the curriculum is to be effective, then the delivery of content should be done with the explicit intent of facilitating reflection in teaching and learning practices, in an interactive, flexible and authentic manner. In addition, the outcome of reflection on the participants in this study, allowed sport studies students to draw on a vast array of collective knowledge, to exercise professional judgment, as they acted individually. This notion is supported by Edwards (2007).

This study interrogated the participants' interactions in the classroom, when they were uncertain about course content. They revealed that when they did not understand content, they were comfortable to ask people in their surrounding space. Therefore, it makes sense that when students are sitting with a particular socio-cultural group, the interactions would be contained within that particular socio-cultural cluster, and very little cross-cultural engagement would occur. Rowe (2012) acknowledges that in the South African context, learning is an activity, which students perform in a socio-cultural context, rather than in isolation. Therefore, when students interact, while engaging with course content, it does not bode well for collaborative construction of knowledge and engagement if their tendency was to sit with students from the same socio-cultural background. Even worse, should the same lack of understanding occur in a different socio-cultural group that is academically weaker, that group would be at the disadvantage of not being able to receive clarity on the course content, thereby, widening the gap between those who know and those who do not. The students who know, might be from a more advantaged schooling background, because of better resources afforded by an apartheid government, therefore, the legacy of apartheid still hinders cross-cultural interactions within the classroom. This may lead to huge disparities in the classroom, regarding engagement, collaborative

construction of knowledge, interaction, engagement and course marks. Therefore, the use of a gamified space that allows for randomisation of groups, may allow for deeper and more meaningful engagement and interaction. The propensity to engage with peers in close proximity, suggests that memory traces are used as a vehicle through which social interactions are carried out. The implementation of the game in random groups allowed for a better work ethic, as opposed to engaging with the game in their normal clique. The social phenomenon of cliques, highlighted in Section 5.2.1.3, shows that there is reproduction of actions in the existing system, however, the use of the digital game allowed for the adaptation of these actions. Therefore, the interactions with the digital game shows that productivity levels increased, because of randomisation. Unfortunately, the memory traces are linked to segregated ideologies entrenched in the higher education system, which creates conditions that reinforce the existing social system of segregated/homogeneous interaction.

Therefore, regarding randomisation of the classroom, this may be a transformative medium, through which rules and resources can be produced to allow for cross-cultural engagement. However, Barab and Squire (2004) reiterate the importance of inquiring about cultural contexts; if cross-cultural interaction is to be created, the cultural context cannot be ignored. In addition, Greenhow, Robelia and Hughes (2009) highlight the importance of cultural distances to be included in the acquisition of 21st century competences, which include multimedia work in complex project orientated teams. Hull and Nelson (2005) purport that web-based social networks often foster intercultural knowledge development. Regarding group development, culture affects online group development and process, as cultural groups apply their rules for interacting and using artefacts in an online environment (Carabajal, LaPointe & Gunawardena, 2003). Kramarae (2003) suggests that, as with all new technologies, users will make alterations based on their own needs, cultural ideas and values. Kramarae (2003) adds that, while many students find online courses particularly stimulating, when students come from several cultures, they also find that communication principles in different cultures are seldom explicitly discussed or honoured. While this study, samples students from both a Social Science and Science background, it purports ideas similar to that of Mason (2003), who suggests that students from a science background, for instance, have different skills, approaches to learning and habits of studying, than do their fellow students, who have pursued arts subjects.

This study avers that any learning environment that adopts a process of digitising the learning environment should cater for various cultural dimensions in the task development processes. This notion is supported by Peters (2003), who indicated that digitalisation of the learning environment should not neglect cultural dimensions in the process. This sub-section allows for the interrogation of research question 4, 'What mental traces enable, or constrain, cross-cultural interactions in sport studies?' The discussion above shows that cultural clustering is also linked to the geographical area that students hail from. Additionally, it is important to understand that historically, South Africans were allocated living spaces, according to the Group Areas Act, which specified where cultural groupings could occupy land. The distribution of land has not changed much since 1912. The geographical implication of cross-cultural interaction is also supported by Moloi (2007), who indicated that, in the new South Africa, the historical challenge is linked to geographical separation, in terms of the concentration of similar groups within an area. Therefore, the historical traces of location are present and create conditions that affect cross-cultural learning in sport studies.

7.2.4. Level of Engagement

Student engagement is empirically linked to success in higher education (Strydom & Mentz, 2010). Student engagement is seen as an evolving construct that captures a range of institutional practices of student behaviours, related to student satisfaction and achievements, including time on task, social and academic integration and teaching practices (Kahu, 2013).

While there are no significant differences in classroom engagement scores, there was a slight increase in classroom engagement, throughout the study, over a period of time (Table 6.6). Interestingly, Cohort 2014 expressed a slightly higher level of engagement (mean = 2.30) score than the 2013 cohort (mean = 2.34). This is interesting, given that they make less use of technology, than their 2013 counterparts (Figure 6.1). Even though this increase was not significant across the various points in time, there is evidence of value that educational technology tools have a positive impact on the level of engagement in sport studies. CHE (2010) suggests that student engagement data can be used to enrich orientation programmes and create interventions for specific groups. Additionally, there was no increase in engagement scores of the participants in Cohort 2013, who were only exposed to games as an intervention, or Cohort 2014, who were exposed to games, wikis

and blogs. Therefore, no difference in the level of engagement was observed between cohorts.

It should be considered, however, that students may have experienced a learning effect, since the engagement scale was asked in the pre-questionnaires, as well, which could be the reason why there was no significant difference in student engagement scores, quantitatively. To qualify some of the findings, the researcher wishes to draw attention to Taylor and Parsons (2011), who indicate that there is a gap between what educators consider engagement in learning, and what students do; therefore, it is important to consider how students may have interpreted the engagements scale on the questionnaire of the self-reporting instrument. According to CHE (2010), while the quantitative data may not have yielded significant results, student engagement data is especially useful in understanding students' perspective on their learning experiences at institutions. The higher education institutions need to change the method of teaching, as well as the content, in order to engage learners to move from didactic to constructivist pedagogy (Taylor & Parsons, 2011). Kahu (2013) recognises that the consequences of student engagement include not only the more obvious academic benefits, but also the longer-term social impact, which has the potential to exert a greater influence on students and society, than simply learning content. Therefore, within constructivist pedagogy, creating innovative strategies/interventions to foster engagement, using emerging technologies, is useful to also recreate, or develop, measurement instruments that would allow for a different type of reporting, on the levels of engagement for quantitative purposes.

Insightful emphasis was given to South African higher education institutions that students should be required to engage in practises that aid them to be successful. This does not imply that all undergraduates have exactly the same engagement experiences, quite the opposite, which often leads to paralyzing thoughts of how to go about doing this for thousands of students, particularly in resource constrained environments, such as the institution under study (CHE, 2010). Kuh (2007) suggests that senior students are more at risk to dropping out of university, and therefore, it is important that institutions engage with students upon their arrival to express their expectations. The impact of the learning context on engagement reflects a range of approaches used by students and tutors, from falsehood to veracity (Wimpenny & Savin-Baden, 2012).

7.2.5. Group activities while using education technologies.

Group work was one of the prominent themes that emerged from the pilot study. While the findings of the pilot study suggested that there are pros and cons to group work, the results of this study showed a difference in cohort preferences to group work. Consequently, Cohort 2013 preferred group work, up to 12.2% more, than Cohort 2014 (Figure 6.2). However, following a randomisation of teams, both cohorts indicated that the group they were assigned to was not one that they would normally engage in educational activities (Figure 6.2). Low numbers of participants in Cohort 2013 and Cohort 2014 (26.1% and 34.9%) routinely interacted with the random group members and the majority of both cohorts revealed that this was not a group; they would normally interact with in the classroom. However, following the intervention, both Cohorts indicated a strong willingness to interact with the same group in the future (84.8% and 79.1% for Cohort 2013 and 2014 respectively). This is an encouraging result as this implies that the advantage of diversity in the classroom may allow for more meaningful integration and engagement, creating more room for cross-cultural collaboration and construction of knowledge in a diverse classroom space.

In addition, the introduction to new acquaintances in the class seems to have had a positive influence on the participants' willingness to interact with a new group in the future. This signifies that perhaps academics need to make a concerted effort to facilitate interactions between students, who do not normally interact with one another in the class. Clear evidence of transformative structures is present, as a small number of participants indicated that they had never interacted with their assigned group, yet in excess of 75% indicated a willingness to interact with the same group in the future. This indicates that the production of new structures, regarding interactions across groups, has the momentum to continue beyond the intervention adopted in this study. It is also important to acknowledge that the emerging technologies used by academics, is a structure in itself, and that careful consideration of the affordances of these tools should be taken into account for the purposes of structural transformation. Sullivan (2012) intimates that engagement may be affected by the 'cohort effect', which means 'students identifying collectively with their peers' as a learning community. Student engagement is more than just an internal static state; this individual experience is embedded within socio-cultural

context and shown as influenced by characteristics of both the student and the institution (Kahu, 2013).

The participants from both cohorts indicated that they had learnt something from their new team members. This finding affirms the sound methodological standing of this study, in which the randomisation (modality) of groups facilitated a better learning process, than would it have been, if students were allowed to form groups by themselves. Their default position may have been to gravitate toward groups they would normally interact with in the classroom. Additionally, when working in groups, participants revealed that they were more likely to interact, in a more constructive manner with a new group. In addition, there was a strong indication that the participants in this study perceived the digital game to be a valuable learning tool, with 97.8% and 72.5% of Cohort 2013 and Cohort 2014 respectively, offering favourable affirmation. This bodes well for the future of educational technologies in the classroom. The participants in this study were able to access the digital game as they wished, in a flexible manner. Again, it was evident that the structure of signification was activated as the modification of interpretive schemes, which is drawn on by the group activities, though the interaction of communication was embedded in the social structure (the group) as meaning or signification. There was a clear shift in the participants' interactions with group members, in a more constructive learning manner, consequently, facilitating cross-cultural engagement in the classroom.

The use of digital educational technology was an effective way to learn. The high scores reported reveal the affordances of digital games on learning. The participants were able to use the digital game as a learning tool, which, as a result, changed their perception of learning in a novel way. In his review of literature, Leaning (2015) reveals how gamification in education focused on the use of games to engage learning, to motivate students to engage more with core subject matter, using a gamified activity. Social learning spaces can foster social interaction among students. Social learning spaces could provide students with an outlet to develop social networks with peers that could lead to greater engagement in active and collaborative learning, and facilitate the sharing of knowledge to meet academic challenges (Matthews, Andrews & Adams, 2011)

In addressing research question 1, 'How does students' prior experience with face-to-face interaction affect cross-cultural engagement using digital games?', prior experiences

with cross-cultural engagement was minimal, as very few students interacted with peers from different socio-cultural backgrounds, thereby negatively affecting cross-cultural engagement. However, with digital games, a strong willingness to interact with the same group in the future is evident. Additionally, there is evidence that students are more productive, when engaging with the game in non-homogeneous groups. Therefore, the structuring properties of the digital game made it possible for similar social practices to exist across time. The following section comprises a discussion related to the modalities.

7.3. Section Two: Structures that facilitated cross-cultural interaction

Rossoni (2006) suggests that agents interact with each other, (re)producing social structures through modalities of structuration. Therefore, in this section the means by which structures are drawn upon to perform social actions of cross-cultural interaction are discussed.

7.3.1. Experience with other technologies

The majority of participants used social networking for the purpose of studies, with a high number using Wikipedia and watching YouTube, and very low numbers editing Wikipedia pages and creating blog posts (See Figure 6.1). The propensity for using social networking for the purposes of studying suggests that students' actions, as knowledgeable agents, indicate that social learning activities occur in virtual spaces. Therefore, students, through being knowledgeable agents have activated their social consciousness by wielding their own power to communicate and learn in a flexible way. In doing so, they have produced their structures of social actions by using social networks to study in the development of new norms. The action of norms relies on power relationships for their effectiveness and are deployed through symbolic, as well as linguistic devices (Jones & Karsten, 2003), such as social networking tools. While the majority of participants used social networking sites for studying, fewer participants in the 2014 cohort engaged on the various platforms, as shown in Figure 6.1. This indicates that there is a decrease in the use of social networking platforms from the 2013 to the 2014 cohort. Therefore, adding interactive tools to the 2014 intervention had merit, as the participants appeared to be less engaged in social networking tools for learning.

A large proportion of the participants used the Wikipedia platform, yet fewer edited the platform (See Figure 6.1). It appears that platforms such as Wikipedia were used to gather

information, instead of contributing to it. This begs the question as to the reasons the participants do not edit Wikipedia pages. Since a large majority of both cohorts had not edited Wikipedia platforms, it could be inferred that such action may not be deemed as appropriate behaviour and that sport studies students are rule following and rule creating beings, who are knowledgeable about their actions, as indicated by Tucker (1998). The structures of legitimation, as played out here, suggests that there are social rules, which are embedded and endorsed by most sport studies students. This view is supported by Orlikowski (2000), who argues that technology structures are emergent and endorsed, not embodied and appropriated. Similarly, the unique usage of Wikipedia by users in this study, starts with human practice and how they recursively interact (or not interact) with the technologies at their disposal. Therefore, if there were less of an inclination to edit on Wikipedia platforms, their actions would only reinforce the existing system manifested as lack of interaction, thereby not constructively developing new knowledge. This finding challenges arguments by Baird and Fisher (2006), who indicate that social networking media engages the user in content and allows them to be included as an active participant, as they construct a learning landscape, rooted in social interaction, knowledge exchange, and optimum cognitive development with their peers. However, for this study, it appears that the full potential of social networking platforms is not used optimally by students, which, therefore, may affect social interaction, knowledge exchange and engagement with peers.

Low numbers of participants in the 2013 cohort and no participants in the 2014 cohort created a blog, with a minority of participants commenting on blogs across the study. Again, there seems to be a trend that the 2014 cohort had much less interaction with social networking platforms than the 2013 cohort. In this study, participants from Phase 2 of this study interacted on a blog, because of the blended learning environment. This signified that they were exposed to a relatively old type of educational technology, which may have been used in a novel way for them. The use of blogs and micro-blogging platforms has become a social phenomenon. While the majority participants claim to use social networking sites to study, very few are actually using sites that are geared toward social interaction. However, it appears that the material properties of technology tools may not be seen as relevant to participants in this study and, therefore, they may not have an interest in interacting on such platforms. This speaks volumes about the rules or ideas about technology tools, such as blogs, and how students adapt rules related to study, to

develop structures about studying in social networking spaces. There appears to be a link between the material resources (such as wikis and blogs) that students draw on in a process of structuration.

A high percentage of participants from Cohort 2013 responded to watching YouTube videos (See Figure 6.1); however, fewer participants have uploaded content of their own. Again, there appears to be some comfortability for participants using the YouTube application for viewing, however, less so for uploading their own content, as seen across all the social networking tools used for studying. Baird and Fisher (2006) indicated that the convergence of social networking technologies and a new pedagogy of learning in the digital space, is rapidly changing the face of education. Social networking provides the opportunity to take the social interaction to deeper levels, as well as address learning styles rooted in digital technologies (Baird & Fisher, 2006).

Therefore, at the level of interaction, as prescribed by Giddens (1984), modalities mentioned above are the sites of interaction between the knowledgeable students and the structural features of social systems, which are manifested as social networks. It is important to remember that modalities are interlinked and, therefore, the actions of students, when studying, are informed by structures through interactions on social networking sites. However, despite the information, with regard to their experience with other technologies, there is no significant difference between the cohorts, with regard to working online, and the comfort of working online did not significantly change over the course of the module (See Section 6.4.3). In giving an account, their level of confidence when working online, online sharing, use of new tools and learning while using the internet, participants from Phase 2 indicated that they were more comfortable working online, as opposed to their counterparts in Phase 1. After the intervention, they were more comfortable working online. This is an indication that the use of multiple emerging technology tools, allows for the development of confidence.

Web-based technologies, such as wikis that are developed have seen potential to support student learning (Baird & Fisher, 2006). The current use of emerging social networking technologies offers neo millennial learners the flexibility and ability to create learning communities and revisit content as needed (Baird & Fisher, 2006). Hazari, North and Moreland (2009) highlight the value of social networking in the mobilisation of being

involved in a common goal. Interacting and sharing knowledge is made possible by shared access to knowledge that resides in people, documents, databases, and this access is available in a web-based environment presented on desktop computers, or mobile devices. Hazari, North and Moreland (2009) suggest that social networking tools, such as wikis have been used as enablers to facilitate learning, However, it is important to note that no single technology by itself (like wikis) can affect learning outcomes. In reviewing the literature on current trends and growth of social networking, Okoro, Hausman and Washington (2012) emphasised that communication between students and faculty members is of paramount importance in ensuring accountability and responsiveness. They further argue that social networking is instrumental in achieving these objectives. In addition, there are claims that social networking sites enhanced course material and closely monitored students' research projects and other writing assignments.

Social networking as a classroom tool is a natural extension of students' use of Web 2.0 technologies in other aspects of their lives and interactions with peers (Okoro, Hausman & Washington, 2012). Taylor and Parsons (2011) suggest that in order to improve student engagement on an intellectual level, one of the eleven common design principles is embedded in engaging students to become literate with technologies, such as social networking knowledge-building tools. This may include wikis and blogs.

In addressing Research question 2, 'In what way does emerging technologies facilitate cross-cultural interaction in the sport studies classroom?' the discussion above indicates that the use of social networks for study purposes indicates that students socially construct knowledge. However, the lack of interaction on a number of tools (such as wikis and blogs) reinforces the existing system (lack of interaction), which may hinder cross-cultural interactions.

7.3.2. Participation in games prior to intervention

The results show that although the majority of participants had played console games before, many have not played educational games. The indication was that for many, this was their first opportunity of playing a digital learning game. Therefore, the material resources had the potential to influence social practices, through the process of structuration.

Results reveal that there is a gender bias with regard to the gender distribution of the participants who played games (See Table 6.2). The majority of males in both cohorts had previously engaged in digital games, whereas less than half of the female participants engaged similarly. The marked increase in the number of females who engaged in digital games during phase 2 of this study may suggest that equity is being achieved in the gamified space. Jones, Caton & Greenhill (2014) concur by asserting that females are increasingly playing digital games. Furthermore, Cicchino (2015) found that significantly more females had content knowledge and retention than their male counterparts did after engaging in a digital game. If this trend should continue, female students in this course could surpass their male counterparts with regard to their experience and exposure to digital gaming. Additionally, this may suggest that, through a process of structuration, females are more enabled to adapt rules and resources in interaction, by producing new dominant structures for the purpose of interaction and learning.

African students presented the lowest number of students, who had previously played normal digital games. The majority of African students enter HEI's from historically disadvantaged areas. As mentioned, the public schooling system is widely acknowledged to have failed, with the result that the majority of schools open to Black learners continue to be marked by the sort of conditions characteristic to apartheid (Bozalek & Boughey, 2012). Therefore, the opportunities for Black students to be engaged in normal digital games may be compromised because of historical inequalities. It is the opinion of the researcher that the traces of the apartheid system are systematically disadvantaging students from poorer backgrounds in various ways, one of which is access to digital games.

Coloured participants represented the highest number of participants, who engaged in digital games. This may be because of the high numbers of Coloured participants represented in this sample. Coloured people represent the majority of enrolments at the HEI under study. This is consistent with the enrolments in the department where this study has been conducted. In addition, this finding reveals that the large number of homogeneous groups may be one of the reasons why students group themselves with peers of a similar background.

7.3.3. Playing in random groups

Engaging with the digital game in random groups fosters self-confidence, which has an impact on academic performance. As presented in Section 7.2.2, self-confidence is achieved through wielding power by exploiting the resources, thereby producing and reproducing structures of domination. Engaging in the game with group members, who were not familiar to the students, affected their level of interaction and, because they shared the academic space equitably, the participants felt comfortable providing answers to the game (See Section 5.2.4). This action suggests that there may be a shift in power relations, as students were able to draw on resources, in order to provide answers in a group, ultimately exercising their newfound power. Therefore, confidence as a structure of domination draws upon the material resources, in order to produce new rules (of interaction) in a social institution. This would have an impact on the norms, which inform interaction and, therefore, appropriate behaviour, consequently activating structures of legitimation, as new rules (structure) are produced. Very few participants interacted with some of their group members (See Figure 6.2). This meant that there was little interaction and little opportunity to engage, as well as learn from other peers, prior to the gaming intervention. The implementation of emerging technologies, therefore, influenced the behaviour of the knowledgeable student agents, which is likely to be maintained, and is further evidenced by the likelihood of future interactions in this social institution. As a result, the use of emerging technologies in the classroom allowed student agents to build capacity in order to transform structures in the classroom. Therefore, structures of signification, in terms of understanding the roles, had been reshaped and structures of domination were reproduced, as they exercised their power, when engaging in a cosmopolitan group. Structures of legitimation were also reformed, as rules were changed and their appropriate behaviour was marked with confidence.

Additionally, existing structures linked to clustering affects the interactions in the social system, as the social actions of learning and collaborative construction of knowledge is hindered, and students are less serious about learning, when in homogenous cultural groups. Previously, the participants' groups comprised their friends, where the way they may have communicated, informed their roles and interactions in these groups, and thereby, activating structures of signification. However, in a cross-cultural group, it is clear that the dominant norms they were used were reshaped into a new structure of

domination. It is evident that the work ethic was perceived to be much better, when playing in random groups, therefore, drawing on new structures of signification, domination and legitimation. The findings of this study concur with Baab (2012) who reveals that students, who work in groups, tend to support and prod each other to contribute and participate, and view the outcome as jointly owned. In addition, Neumann and Hood (2009) suggest that wiki promoted collaborative learning and enhanced the participants' attendance in class. While learning outcomes on assessed work was not measured in this study, there is clear evidence that the randomisation in this study improved areas of cross-cultural engagement.

Reflecting on research question 5, 'How does the implementation of emerging technologies affect interactions in face to face cross-cultural interaction in the classroom?', it is evidenced that, because of emerging technologies, there is a stronger work ethic, as students produced new structures related to their seriousness, when working in multicultural groups. Previously, work was not prioritised, when working in their familiar group settings.

7.3.4. Novelty and Innovation

As a novel approach, this innovation was the first of its kind for these cohorts, as none of the other classes used a digital gamified approach for teaching and learning purposes. Consequently, students developed agency, when they independently acknowledged that they were able to have more focused attention (See Section 5.2.3.1.3). While students entered into a learning environment that was not of their own making, they were still able to apply reasoning and critical thinking skills in a social-constructivist learning environment. Ilyas, Rawat Bhatti and Malik (2013) concur with this thought. The outgoing structures of legitimation are also highlighted by students, who hint on the didactic nature of the previous learning environment, thereby, highlighting that traditional classroom approaches operate through norms (modality), which reproduces structures of legitimation.

At a level of interaction, the eliciting of power, while playing a digital game in a classroom, enhanced their levels of attention, thereby restructuring the norm in the classroom and intimating that attention and focus in classrooms offering traditional didactic approaches, do not allow for the same type of focus interaction/attention. While

digital games in the classroom may not be novel in other areas of the world, this is consistent with Veletsianos (2010) notion that emerging technologies may not necessarily be new. The participants added that they were able to develop digital skills that were transferable into the real world. This finding is further discussed under the Section 7.3.6.

The novelty and innovation was not appreciated by all students. One participant suggested that the use of this game should be individualised, thereby revealing a preference for a more didactic approach. However, it was just argued that attention and focus in classrooms offering traditional didactic approaches do not allow meaningful interaction. The mention of didactic methods of teaching highlights the duality of structures, as underpinned by the norms, cultures and rules (structures of legitimation) that may affect all students, and not only the lone student, who highlighted this preference. The reproduction of this legitimation, in this instance, didactic teaching methods, is facilitated by the dominant norms. At the level of interaction, the repercussions (sanctions) thereof, may not lead to reshaping of human actions.

7.3.5. Digital Skills

The acquisition of 21st century skills is one of the graduate attributes at the HEI under study. However, the intervention invoked a sense of agency as the game developed competencies with regard to the digital space. During the development of digital skills, the issue of trust emerged. Giddens purports that the most important feature of the role of the unconscious in everyday life is through the development of trust (Tucker, 1998). Since trust is an unconscious activity, it is mediated through social interaction. Giddens also states that social conditions usually generate anxiety that must be overcome with a sense of trust. Therefore, the ontological security, which is trusts, shapes the meaning that students place on social interaction and, therefore, structures of signification. The use of the wikispaces platform may have inhibited cross-cultural interaction, due to levels of distrust. As Giddens argues, structures may enable, or constrain, social action. This has implications for structures of legitimation, and the sanctions imposed are negative, as interaction on the platform may lead to levels of distrust.

While there may be acknowledgement of the benefits of emerging technologies for developing digital skills, students may still be sceptical about the uses of technologies.

Álvarez & Cuesta (2010) highlight that collaboration in a community of teaching online environment enables individuals with the building of trust to pursue common goals, when they affiliate themselves with affinity groups. In addition, Spector (2013) purports that one of the challenges that stakeholders in education systems may have, is to develop trust in the systems by adequately preparing students for productive 21st century lives. This is also consistent with findings in this current study and that of Baab (2012), who reveals that students in their study indicated that they welcomed comments from the instructor, but were not happy for others to see their work.

In relation to research question 2, 'In what way does emerging technologies facilitate cross-cultural interaction in sport studies?', it is clear from the above that emerging technologies do not always facilitate cross-cultural interactions in the classroom, as there is a level of distrust of the technology and the people who use it.

7.3.6. Learning in a social-constructivist authentic environment.

A discussion is presented in this section regarding the participants' experiences of completing an authentic task in a wiki platform. These experiences were extracted from reflective summaries posted on the class blog. Only participants from Phase 2 were required to complete the task, in order to determine whether games alone or a combination of games, wikis and blogging allowed for better cross-cultural interaction. The discussion that follows is based on an analysis of the data, through the lens of authentic learning, structuration theory and social-constructivism. Herrington, Reeves and Oliver (2010) provide the nine elements of authentic learning as:

1) Provide authentic context;

2) Authentic task;

3) Access to expert thinking and modelling of processes;

4) provide multiple roles and perspectives;

5) support collaborative construction of knowledge;

6) Promote reflection;

7) Promote articulation;

8) provide coaching and scaffolding;

9) Provide authentic assessment.

Neumann & Hood (2009) suggest that, in line with social-constructivist thinking, wikis support collaboration among peers, where they can work together to construct knowledge and share ideas. The participants in this study agreed about the authenticity of the wiki task and the use of the blog as another tool, which may mediate learning and their experiences thereof. To this end, the mean scores across this range of questions are between 2.15 and 2.46 (See Table 6.5), which indicates general agreement with regard to the principles of authentic learning, highlighted in Chapter 3. Students, who use wikis to write practice reports, were found to have higher ratings on engagement with other students and cognitive engagement, than students, who did so individually (Neumann & Hood, 2009). The findings from Neumann and Hood (2009) study reveal that a wiki may promote engagement and discussion among students. In addition, participation in a wiki task might be enhanced, if it was integrated with course assessments (Neumann & Hood, 2009).

The findings of this study show that *providing authentic context,* which refers to complexity of real life settings, highlights the multiple sport contexts the wiki task may have been reflecting. The involvement with an authentic task on an emerging technologies platform, firstly, shows that agency is involved, as it informed their understanding of the role a sport psychologist has, in a social institution, such as the sport environment. This indicates that students draw on interpretive schemes to create meaning within their social structure. This production of signification is further amplified through communication, as participants are able to gather information about their peer's background, thereby cross-cultural interaction is produced in the classroom. Additionally, the awareness of particular appropriate behaviour of a professional suggests that students develop practical consciousness to understand the norms (modality) that inform interaction and, therefore, iteratively produce structures of legitimation.

Within this element, the skill students may require after they graduate in the real life context is developed because of engaging in the wiki task. From the perspective of cross-cultural interaction, further evidence (see Section 5.2.3) suggests that they are learning things about other people in their class, due to the applied nature of the task. The social-

constructivist learning environment that was created is affirmed, as Vygotsky (1978) explains that learning takes place through interaction with other people in a social and cultural context. Using emerging technologies, students were able to gather more information about other classmate's background, which would have given them better perspectives of their fellow classmates. In sport studies, it is apparent that students may prefer this type of flexibility as the nature of sport science programmes includes practical aspects that require them to be outside of the traditional classroom (McMullen *et al*., 2013). The central aspect of structuration theory is concerned with order as which transcends time and space within human social relationships (Giddens, 1984), thus providing some indication that the use of technology in this study has transformed the institutional structures that previously limited interaction and familiarization with peers in a virtual space.

The *authentic task*, which reflected real world relevance where the task allows for, prolonged engagement where the activity is completed over a period. Therefore, an opportunity exists for students to detect relevant information from various sources (Herrington *et al*., 2010). In this intervention, participants were allowed 10 weeks to complete the wiki task. Tasks designed within authentic contexts took into account the time required for completion as prolonged engagement allows students enough time to detecting and retrieve relevant information, which they may draw from various sources. The authentic tasks also allowed for a research-based assignment to be integrated with work they are required to do in the class and outside in the real world as highlighted in the results (See point 2, Section 5.2.5). For Giddens the notion of time is important in structuration, as the production and reproduction by social actions is on-going (Giddens, 1984), therefore, the maintenance of social interaction takes place in time and space (Tucker, 1998). Thus, time plays an important role for the production and reproduction of social practices. If students, as individuals, or in groups, engage with one another in a way they had not done before, then over time, new structures related to cross-cultural interaction may develop, as students have the capability to transform structures, using material resources, such as wikis.

Students exercise power by exploiting the resources, such as the wiki and blog, in order to complete the authentic task, thereby reproducing structures of domination. Through a process of communication, agency is evoked, as participants learn to share stories of their

peers on an online authentic medium. Therefore, communication is important for students to understand the role of their peer, which produced meaning through a modification of interpretive schemes, thereby illuminating structures of signification. Therefore, the link between structure and agency can be inferred, as the reproduction of society is a practical activity, in which meaning is bound (Giddens, 1984; Tucker, 1998). Reading their peers profiles also produced meaning for the participants and, therefore, reproduced structures of signification.

Tool mediated authentic learning allows students to feel immersed in their own role that they adopt as sport psychologists. In addition, to writing their own wiki, they were of the opinion that reading other students' wikis, gave them more insight into their peers, therefore, deepening interaction across diverse cultures in the classroom. While social constructivist approaches offer opportunities for collaborative learning (Ilyas *et al.*, 2013), as supported by the findings of this current study, Colburn (2000) further notes that, before entering the classroom, students have a multitude of experiences. These experiences are, therefore, more meaningful as students build on prior knowledge and experiences through an online task. As knowledgeable agents, students understanding of their practices would be limited, if there was no engagement with emerging technology tools, which may lead to unintended consequences, such as cultural clustering, in their day-to-day academic experiences. The challenging nature of authentic tasks was identified by the students as useful because they may have to experience similar challenges in the workplace. The findings of this study are consistent with the findings of a study conducted by Baab (2012), who reveals students' perceptions that the use of the wiki has significantly enhanced the process, as well as the product. Much of what was reported is consistent with elements of authentic learning of Herrington *et al*. (2010). By affording students the opportunity to engage in a real-world activity, allowed them to make learning more meaningful and relevant for what they would be required to do outside of the learning environment. It appears that by appropriately structuring an authentic task, students were able to decontextualize formal learning (Hannafin, 1991) by dividing the activity into manageable tasks across a 10-week period.

With regard to *expert thinking and modelling*, the authentic learning task was designed to facilitate interaction with knowledgeable counterparts in a free and safe space, where they would be able to share their narratives. It appears that often the access to

'knowledgeable others' may not necessarily be a physical person, but may be in the form of accessing information they could rely on, on the internet. It appears that Google becomes the expert, when students are unable to gather information from their textbooks, or from their peers (See Point 3, Section 5.2.5). This finding is consistent with their propensity to use social networking sites for learning, as discussed in Section 7.4.2 (also Figure 6.1). The use of the internet, as a material resource, is a social phenomenon that is deployed by students as an enabler for modelling and thinking about learning and concepts. Although participants are knowledgeable agents, the use of the internet as a material resource, allowed for the development of agency, where students draw on allocative resources, to reproduce structures of domination. In addition to the use of the internet, technical assistance is sought from peers, when there is uncertainty with regard to the use of the tools. Therefore, the social relations between students are produced to become regular practices over time. Because of thoughtfully allowing expert thinking and modelling, there is a clear transformational shift that students were initially apprehensive about their peers' ability to access and comment on their work. This attitudinal change reveals that, when using technologies, the features of the tool is purposively used to reproduce structures, as there is an appreciation of critique and objective opinion. The participants in this study found it '*rewarding*' receiving feedback on their projects from the perspectives of their peers, because of the constructive nature of the comments from peers, whom they were able to seek expert advice from, to improve their final product. This is consistent with social-constructivist thinking that wikis support collaboration among peers, as they are able to work together to construct knowledge and share ideas (Neumann & Hood, 2009).

The multiple roles and perspectives as embedded in the wiki task again highlighted the importance of communication in an online space. Communication with peers through the commenting feature on the wiki, produced new structures of signification, as the students were able to make sense of the interactions, which modified structures of signification. This suggests that students had a new understanding of everyday social practices and that there were norms, which affected, what some may deem, appropriate behaviour in class. It may be seen that some students preferred to be quiet in the class. However, using emerging technologies as allocative resources, all students had the power to exploit these resources, by wielding power to produce and reproduce structures of domination. The outgoing structures also revealed that, under normal traditional teaching approaches,

constructive feedback might make some students feel insecure. This amplifies structures of legitimation, as it draws on the sanctions that are present submitting traditional assignments. This reveals the outgoing structure of legitimation, while at the same time introducing structures of domination, as the participants had the opportunity to elicit material resources to exercise power.

Experiences from the participants in this study reveal that the authentic learning opportunity created in this module allowed them to work in pairs and within a broader community of practice, thereby *supporting collaborative construction of knowledge.* Sharing of ideas and commenting on other classmate's wiki tasks allowed for the production of a better quality assignment. Sharing ideas and working together highlights a process of social interaction, where students are able to communicate by drawing on interpretive schemes, in order to produce and reproduce structures of signification. They also reported that they were afforded the opportunity to integrate theory, which builds on previous knowledge obtained through the module. This is indicative of the application of prior knowledge and experience, using reasoning and critical thinking skills, which is common in social constructivist thought, as understood by Wilson (2011).
Structure is a result of social practices (Giddens, 1984). Therefore, the students' ability to accept criticism, without being personally offended, suggests that a reproduction of social practices has been observed, as the affordances of an authentically designed wiki task influenced the social roles that students adopted. Even though students were required to complete their assignment individually, they indicated that it felt like they were '*working as a group'* (See Point 5, Section 5.2.5). The participants also commented on the '*easy communication'* platform that the wiki afforded them.

Communication is an agentic feature of duality of structure and this task made social integration and interaction possible in a virtual space, by allowing students to draw on material resources, such as the wiki. Therefore, the interactions of students are guided by new forms of communication, which are embedded in rules and resources that make up social structure. In this study, an authentic wiki task mediated a sense of enlightenment, as students were able to familiarise themselves with their classmates, and learn from other people's experiences. In this element it appears that feedback, both of a positive or negative nature, was constructive. This indicated that they were open to feedback of any kind, as long as they were able to identify its value. While the wiki task allowed for

creative freedom, it also assisted them to learn and understand content, by collaboratively constructing knowledge about the subject on a wiki space. In addition to social learning, a better learning effect may be observed, when the experience is undertaken with one or more experienced peer, or educator (Vygotsky, 1978). The authenticity that the game fostered, with regard to being exposed to varying viewpoints, is laudable and may allow for deeper richer interactions among peers, as well as a more rounded learning experience in a blended learning environment. Game design principles include gaming strategies of problem solving, strategic thinking and interpretive analysis with the overall aim of encouraging engagement and motivation to learn in a fun game like environment (Kanthan & Senger, 2011).

The wiki task was designed to *promote reflection* where students were able to compare their ideas with knowledgeable others and allow them to make decisions about how to complete a task, freely. Giddens (1987) indicates that human beings reflexively monitor what they do, as an intrinsic part of what they do, and that such monitoring is not expressed discursively. It is carried on a level of practical consciousness (agency). Students' ability to agree and disagree about a particular subject suggests that the development of agentic learning was taking place. Students were able to think about how they felt about their own opinion, and express it as such on a virtual platform. Reading about their peer's work, assisted them to think about their own work, without the need to speak to peers directly. This is consistent with the findings of a study conducted by Jones and Karsten (2008), who indicate that technology is a defining space for potential interactions. The development of agency is evidenced by the actions exhibited on the emerging technology platform. Students were reflective and able to reason in a social learning context. It also appears that in the social constructivist space, the participants were able to give meaning to the content and interaction with peers, thereby activating structures of signification.

The structures created through social interaction have provided opportunities to observe new possibilities for interaction by using emerging technology, thereby, highlighting the reformation of social practices, which is vital in the duality of structure. Interaction was clearly lacking prior to this intervention and the findings reveal the value of technologies to challenge structures that impede social interaction and cross-cultural engagement in the classroom.

The authentic wiki task *promoted articulation* by incorporating opportunities to write about their beliefs. Kemp (2000) highlighted the importance of dialogue with other members in the educational space during the construction of knowledge. Due to the nature of this task, where students were able to work with a peer, and also get feedback and give feedback to peers, allowed them to foster multiple ideas in an open, flexible online space. This allowed them to articulate their ideas in a constructive manner on a public platform. These social actions implicate the production and reproduction of structures. The practical consciousness embedded in the responses of the participants; highlight their ability to orientate themselves, based on the situation, and to interpret the actions of others. Giddens refers to this as practical consciousness (Tucker, 1998). Therefore, if students follow the old norms that lack social interaction with peers there may be less construction of knowledge (sanctions), thereby, amplifying structures of legitimation. In addition, they were able to write more clearly, based on feedback they were giving and receiving from their peers. The social constructivist nature of the task, using emerging technologies, highlight how participants generate knowledge and improve academic skills in the online space.

Interactive online was the new preferred method over traditional way of completing assignments, thus amplifying structures of signification. Despite the fact that students did not often speak to the peers in their class, the use of a wiki allowed others to articulate their work in a public space, which made it accessible to the rest of the class. The participants believed that this type of thought and reflection allowed them to write with conviction, as they, obviously, really thought about what they wanted to say.

When developing authentic learning activities, one has to be cognizant of the role of a lecture and tutor. Therefore, for the purpose of *providing coaching and scaffolding* the lecturer and the tutor were available for a significant portion of the learning activity. The collaborative nature of the task also allowed classmates, who were more knowledgeable, to assist with coaching, where needed. Students were able to learn more about the work covered in the class and apply what they had learnt in other courses in sport studies. The application of knowledge in the relevant context is also indicative of the nature of a social-constructivist learning space. Despite the effectiveness of the tool, participants also expressed negative emotions with regard to the wiki assignment. Some claimed that the take made them nervous, which activated structures of legitimation, because the

norms of the wiki allowed for fellow peers to view and comment on all wiki pages. Therefore, the norms that were embedded in the material resource informed the interaction of peers, which invoked feelings of nervousness (sanction). These sanctions highlight the negative outcomes of structures of legitimation. This is consistent with the Theory of Structuration (Giddens, 1984), which indicates that structures can be both enabling and constraining. In this instance, it was constraining. However, their experience was transformed, as they found the task to be challenging, but it the end, they developed a completed product.

Lastly, one of the challenges in this study was to develop an *authentic assessment* method. This meant that an opportunity had to be provided for time to refine the final product over an extended period. The assessment of the task, therefore, should be integrated into the activity and not assessed by means of separate testing. There are multiple measures for one task. While this was a challenge for the researcher to establish, for the purposes of this study, assessment practices were done in the form of peer feedback midway through the process, peer assessment toward the end of the project, and lastly, an overall assessment by the academic in charge of the module. The constructive feedback received through peer assessment allowed for the interaction in a social constructivist space. In addition, the challenging nature reveals the focus on problem solving and critical thinking, to develop higher order outcomes, which is also embedded in constructivist thinking (Wilson, 2011). The appreciation students expressed for comments on their work, allowed for the improvement of their own work [‘c*omment section was encouraging because it was kind of like peer assessment*.’]. Unwittingly, they were interacting with peers they may never have, prior to this intervention.

While the outcome of completing a wiki-based task appeared to have positive responses, results indicate that the new activity may have caused some anxiety to starting the new activity. Given that no students of this cohort had ever edited a wiki page before (See Figure 6.1), they may have been apprehensive starting their own page. As they progressed through the activity, they felt more confident using the wiki tool. Furthermore, results in this study showed that the participants were of the opinion that the tool allowed for reflection on learning, indicating that this task allowed for meaningful engagement in the sharing of knowledge across the classroom. To this end, the ICT tools used in this study provided an open space for meaningful engagement and interaction. This meant that the

interaction on the blog and wiki provided a rich opportunity for students to learn from one another. This study demonstrated that through active engagement and interaction, students were able to learn from one another, through meaningful collaboration and, in doing so, constructed knowledge by learning from one another in an open space. This further demonstrates that ICT tools are extremely valuable to support learning in an authentic context in a social-constructivist learning paradigm.

In previous years, students were offered traditional didactic classroom instruction and were only permitted to submit assignments in paper format. However, because of engaging and interacting with peers as an online community, there are phenomenal shifts in students' cross-cultural interactions and being active participants in an online community. Their ability to seek assistance from peers through this exercise suggests that the application of an authentic task using emerging technologies allowed for the production of cross-cultural interaction, as students adapted rules and resources to facilitate interaction. An authentically designed task allowed students to draw on material resources and its corresponding attitudes, to inform their social practices in an online space. Ultimately, this bodes well for cross-cultural interaction and engagement.

7.4. SECTION THREE: Structures in the Social System

7.4.1. Cross-cultural interaction

The key focus area of this study is linked to cross-cultural interaction. In this sub-section, the complex issues relating to cross-cultural interaction are highlighted. There is a contention student engagement is a shared responsibility, as some students experienced engagement negatively, and, therefore, required a successful transition period (Wimpenny & Savin-Baden, 2012). Students in this study have experienced some apprehension about the topic of culture.

The moral rules inferred by participants regarding their perceptions of what is right and wrong, was highlighted in Section 5.2.1, when a participant indicated, '*you're almost twenty and you haven't been exposed…*', which may imply that they are able to link past and present. This suggests that they are aware that things were different in the past. It also suggests that as they progress through society, they should have interacted with people from other cultures over time. With regard to duality of structure, time is integral

to social practices, which unconsciously invokes the routine and psychologically lined activities that form day-to-day activities. One could argue that these participants are regarded as 'born frees' as most of them were born post-1994 and may not have experienced segregation in various aspects of their lives. However, it may have affected them because of socialisation through family members. While this may be a naïve view on the part of some participants, as the Institute for Race Relations recently indicated, more Black parents will continue sending their children to the growing number of independent schools. We are, therefore, likely to see a continuation of class differentiation between born frees of all races, with good schooling and tertiary education, and those, mainly African, left to the mercies of poor state schools (Cronje, 2015).

Therefore, the conversation to be had, with regard to culture, cannot be ignored in the classroom, when the very people in the classroom may be disenfranchised. While some of the students may be affronted by the conversation about culture, there is an acknowledgment and acceptance, regarding the conversation, and that exposure to a diverse mix of cultures, is a relatively ordinary occurrence for many, especially those, who participate in sport.

Another hindrance to cross-cultural interaction is highlighted by participants, who reported that they do not want to be forced to interact. This suggests that they have agency to act of their own free will. However, the obstacle the participants faced because of the randomisation method used during the intervention, compromised their freedom, which led to unintended consequences. The level of resentment about the topic of culture, as many participants were of the opinion that interaction within culture could not be enforced. The perceptions of the participants, in this instance, are contradictory to previous claims about cultural clustering being unintentional (Section 5.2.1.3). As a result, there are mixed and contradictory perceptions about engaging in the game with peers from different cultures, which highlight the enabling and constraining properties of structure. On the one hand, claims are that forming cultural clusters is unintentional and unwittingly acted out, while at the same time there is clear evidence that it is intentional and that students purposively select peers with whom they interact.

Given the history of group segregation in South Africa, highlighted by contemporary tensions in our society and higher learning, preparedness for an increasingly complex society and the ability to be meaningful role-players in a diverse democracy, is a life skill with which every graduate should be equipped (CHE, 2010). Universities can maximise favourable conditions for this social and personal development to occur. In order to ensure that students develop optimally, through exposure to diversity, a wide range of multidimensional activities, as long-term interventions that deliberately create inter-racial connections, both inside and outside the classroom, should be implemented by institutions (Hurtado, Millem, Clayton-Pederson & Allen, 1999, as cited in CHE, 2010).

Students' mixed perceptions about cross-cultural engagement with peers from different cultures, while playing the game, suggests that the concept is a complex one. Students embrace '*comfort zone'* and prefer not to '*mix[ing] with people'* unfamiliar to them, due to the perception that their marks may be compromised, as seen in Section 5.2.2.1. Therefore, interacting with people outside of their social circle made them self-conscious, which inadvertently meant their marks would be compromised. There is clear evidence that cross-cultural interaction is hindered because of students' independent choices about who they wish to sit with. However, this also highlights the unarticulated rules that govern the sport studies classroom. The loss of control students may feel, when interacting with peers outside of their normal social circle, has made students self-conscious, which inadvertently means that their marks would be compromised, thereby activating structures of legitimation. The social practice of selectivity highlights agency students possess to make informed decisions. However, their decisions have shaped their actions that reinforced the existing system, which informs student how to behave (structures of legitimation). Whether or not participants are selective in their interactions, suggests that participants draw on their own ideas (rules) with regard to interactions. In addition, the issue of socialisation was also raised by the participants, reinforcing the structures of legitimation, whereby sanctions (compromised marks) may be imposed, because of socialisation.

Students today are intensely social and interactive learners and their virtual, as well as personal interactions are shown to improve engagement (Taylor & Parsons, 2011). The issue of socialisation was raised by the participants in this study. The students' keen awareness that the exercise of gamifying the classroom, as well as other activities, was

to coax them out of their comfort zone and into a space of engagement with students in the classroom, with whom they did not usually interact in this particular module. Taylor and Parsons (2011) also indicate that students' responses to this have changed over the last twenty years, in response to their engagement with technology, rich society and changes in upbringing, which goes without saying, when compared to the world that their parents experienced.

Kathan and Senger (2011) highlight the simple use of technology alone to provide excitement, entertainment and constant engagement of the multi-dimensional virtual world will not entice learning in students, who are otherwise accustomed to its overwhelming presence. Furthermore, participants appreciated the value of such interaction, as it started in the classroom, but they acknowledge that it has the ability to transcend from the classroom outside their friendship circles. They indicated that the interaction with the game in a diverse setting allowed for cross-cultural interaction to transcend beyond the classroom, and that playing the game in random social groups created cultural awareness. This suggests that there is openness to interaction; however, the opportunity should be created in the classroom to facilitate this sort of interaction, as it appears that participants in this study have not yet developed a sense of agency to do this for themselves. In this case, it is clear that a gamified space mediates interaction across socio-cultural settings in a manner that promotes cultural inclusivity. Therefore, the game facilitated shared understanding of cultural values across a diverse range of backgrounds present in the classroom

Seating preferences (See Section 7.2.2) of students revealed that when they sat with individuals from different cultural backgrounds, as was facilitated in this study, there was eagerness on the part of both cultures, to learn about various activities that were special to that particular culture. One of the major positives to come out of this study is that participants indicated that the digital game allowed them to engage in cross-cultural sharing of norms, ideals and values. While it is acknowledged that it was a rich experience for the participants to meet people from varied backgrounds, there are still barriers, such as language and location that may affect their engagement with people from different backgrounds. Language is a crucial medium, through which people address social problems together (Giddens, 1984). Therefore, the use of the game uncovered structures of signification, as language is used as a mode of communication.

However, language, in this instance, is an enabling factor, as it allowed conversations to occur in a multicultural setting. It also highlights the possibility that the game allowed students to invoked agency, as the participants were taking responsibility for learning something about their peers' culture, thereby enabling cross-cultural interaction.

Conversely, the participants indicated that the 'language barrier is also a factor as well' that constrained cross-cultural interaction. However, it does appear that the constraining factor was not because of engaging in the digital game. In a diverse setting, participants were able to articulate themselves and act out social practices, but it was not immediately clear how these social practices might be maintained over a period, as there were some constraining factors linked to the understanding of others, due to language barriers. Therefore, the digital game enabled cross-cultural engagement, but the knowledgeability of the participants was restricted by conditions, such as language, that had unintended consequences for their interactions. Regarding cultural clustering, evidence suggests that group norms produced structures of legitimation, with participants highlighting the different types of groups present in the classroom. However, it appears that playing the game assisted in reshaping these group norms. Consequently, it highlights that social systems are important, as it indicates that different types of societies are characterised by different social properties. In addition, geographic location, which is linked to historical segregation, is a factor that affects cross-cultural interaction.

The use of the game facilitated relationship building, as it allowed for interactions with peers the participants would not usually engage with in the classroom. However, they earmarked sport studies students as 'more accepting' (See Section 5.2.1). This indicates that the participants were actively engaging in acting out social practices that not only inform their roles in the classroom, but also highlights that organisational rules justify what may be deemed appropriate behaviour for sport studies students. They are expected to be interactive and accepting of each other.

Playing the game as part of a random group allowed for more effective learning, as the participants had to be more explicit and open in their communication, when they entered a social space, other than the one used with their friends. Additionally, some participants purport that social background did not matter as much as learning capital. They stated, '*actually it's not about being in the social background, it's about who you can interact,*

who you can learn from'. Consequently, they interacted with classmates, based on what they perceived they were able to learn from them.

The viewpoint of one particular participant was that the conversation/communication issues with regard to culture were outdated. This is an outlying finding, which is contrary to the status quo. Much can be interpreted regarding structures of signification in the way the participants communicated about matters related to culture. It is clear from the findings that, while there are mixed perceptions about the issue of cross-cultural engagement, one of the central structures is related to comfort zones. The social systems regarding group work, who they engage with in the classroom, and why they engage with specific people in the classroom, is based on their level of comfort and the report they have developed with their classmates. The initial dominant structure that was activated is akin to the norms of participating with members in a classroom, due to the perception that their marks for a particular subject would not be compromised. It is interesting how the group make-up is determined by academic strength, and not necessarily for the purposes of learning and cross collaborating. However, there is a clear transformation and a shift in perceptions (as a structure), as there is a clear reshaping and reproduction of social systems, through interventions, using emerging technology tools. This study found that after the interventions, participants were able to move out of their comfort zones, and were eager to learn and collaborate across cultures. Furthermore, the intervention, despite the language barriers, which may exist, allowed for acceptance and interaction, even though participants did not know each other's names before the intervention. This means that the entire structure-agency has been reshaped and reproduced because the understanding of roles has been enhanced because of the intervention. Besides, social structures of domination were changed, as the allocation of emerging technology resources reproduced the manner in which the dominant norms of non-interaction that previously existed as recursively implicated social reproduction of social systems.

Another transformative finding in this study is, the participants indicated that the digital game allowed them to engage in cross-cultural sharing of norms, ideals and values. It is clear that the game allowed for the transcendence of invisible boundaries, which hindered cross-cultural sharing, thereby activating structures of domination where power held by cultural norms (as a facility) allowed for the restructuring and sharing of norms in the

classroom. In doing so, while the language barrier may have been a problem for some prior to the intervention, there is a clear indication that there was explicit and open communication, which influenced and informed participants' understanding of others. As their understanding of others roles improved, they no longer needed their former peers because learning superseded the social capital they may have appeared to possess with their other friends. They were able to learn better in a new environment.

Reflecting on research question 3, 'How do cultural clusters engage with each other across cultural settings using digital games?', this study found that after the interventions, participants were resentful about the conversation of culture and negated it as being the reason for the lack of cross-cultural interaction. However, drawing on structures related to comfort zones, students were eager to learn and collaborate across cultures. However, they were aware that if they engaged with others, the sanctions imposed because of that interaction could be manifested in compromised marks. Besides, despite the language barriers, which may exist, the digital gaming space allowed for acceptance and interaction, even though the participants did not know each other's names before the intervention. This indicates that the entire structure-agency had been reshaped and reproduced because the understanding of roles had been enhanced because of the intervention.

7.4.2. Engagement with content through gamifications

The implementation of a digital game made the course content more manageable. The digital game (material resource) tool is valuable for learning, as it is for group-play and cross-cultural engagement, and offered self-study options. The sort of flexibility that the game affords has far-reaching effects for engagement. This implies that students may enter and exit the learning space at their leisure.

Constraining factors linked to social actions were uncovered. Engaging in the game with peers caused conflict because of the power dynamics in the group (See Section 5.2.2.2). Therefore, the constraining factors linked to structures of legitimation informed the social interaction of the participants. Group conflict arose because of incorrect answers by the person controlling the computer, where the digital game was being played on. The structures of legitimation that was evidenced by the conflict were about the peers who operated the computer, as they were perceived as exploiting resources and eliciting power

over the group, in order to reproduce structures of domination. The peers on the receiving end were subject to sanctions because, as a group, they all are penalised for an incorrect answer.

The efficiency of the game is noted as the participants were of the opinion that it took less time than going through the textbook. Consequently, time as a resource is deepened as a social phenomenon, such as studying, and is changed because of a digital game. Consequently, the resources used to learn (agency) shifted from the norm of using the textbook, to the modality of using a digital game, therefore, highlighting the outgoing of structures of legitimation and the production of domination as the new structure. This highlights the affordance of the digital game in this particular format. It makes learning manageable, effective and engaging. Although the participants testified to the efficiency of the game, due to the nature of the game, which allowed for differing perspectives, it may have caused conflict when there were varying viewpoints.

The use of a digital game reshaped students' ability to recall information in a social setting. This agency interplays with many forms of structure. Firstly, the allocative resources, student actors are able to draw of, to produce structures of domination, because they were in control and have power over the resources. Secondly, the collective understanding among group members as indicated that they cooperated well when playing the game is indicative that structures of signification were activated. This is further affirmed by excerpts related to communication, an activity embedded in agency, which showed that actors create interpretive schemes, facilitated by communication, through social interaction, to reproduce structures of signification. This study revealed that the game fostered a social constructivist approach, as students used the game to construct knowledge, collaboratively. Consequently, the interactivity that the game offered, cultivated retention of information. Therefore, they were able to draw on the game, as a material resource, and elicit power, which reinforced structures of domination in a group play scenario.

Productivity levels increased because of the layout of the digital game. To this end, better engagement was noted because the participants felt that content could be accessed in sections. The manageability factor, which was elicited from the pilot study, affected the design and development of the game in a positive manner. The game, therefore, was

designed so that students could access sections, based on the chapters in the prescribed reader by Potgieter (2013). This meant that the content was more manageable and students could scaffold their learning, by mastering one area of content, before moving on to more challenging material, thereby constructing knowledge in a social-constructivist learning environment. This also allowed them to prepare for assessments in a more structured manner, as the content of the sections of the game were aligned to the learning outcomes and main content of the module. As a result, the game assisted with recall of information, especially for the purposes of formative and summative assessments

The emerging technologies in this intervention appeared to be a structure in itself. At the same time, engagement is another structure. The way these structures merge in an interactive space, clearly allowed for better learning and engagement, as the tools allowed for the preparation and deeper interaction among peers.

7.4.3. Feelings of inferiority

Power struggles were observed in this particular module, which offers classes to both Science and Social Science students. Despite the fact that participants in this class shared six of the eight sport studies modules together for that particular year, there appeared to be dissension in the cohort based on the degree of study. There was a general sense of inferiority among students, who participated in a social science programme, as opposed to those, who participated in a science programme. The social science students were of the opinion that they were less smart and, therefore, subservient to group members, who were from the science stream. When linked to cross-cultural interaction, the lack of relations between BA and BSc groups were evident. It appeared as if students were conforming to rules or ideas about how they thought interactions should be taking place in the classroom. These rules and ideas are link to norms, which they draw on to reproducing structures of legitimation. Structures of inferiority hinder engagement with groups that may be linked to power of social orders in the existing social system. This uncovers another structure of domination as one or both groups draw on resources in the classroom to elicit power over the other. There was a strong sense that some of the participants were of the opinion that the BSc group was smarter and, therefore, they often were too afraid to answer the questions.

This finding is one of the reasons that the participants in this module did not socialise well with others, and stuck to groups with whom they were more familiar. Structures of legitimation contend that students abide with the dominant norms in the classroom, and these norms inform their interaction. This is invariably linked with power interaction where, on a more explicit level, power facilitates movement of resources through modalities of facilities in the parallel dimension. The facility is presented as the degree for which the students had registered. Therefore, the participants in the different degree courses used resources in this parallel system to exert power over other people. This is known as allocative resources. However, there is no clear evidence that BSc students are exerting power over others. It does appear that the social science students are colluding in their own subordination, which in itself poses structural arguments about their level of agency and their inability to interact with other students in the classroom. It is clear that the process of structuration is easily observed, as this type of human interaction could be observed over a period and is clearly articulated by the participants. It clearly highlights that the perceptions of some of the participants give insight into how structures of signification informs the manifestation of their perceived roles, when in the company of other students, whom they may deem superior. There also appears to be an expectation that the BSc students should be more knowledgeable than the social science group of students. There was a sense of disbelief when the BSc students answered questions on the game incorrectly. Therefore, at a level of interaction, when playing the digital game, the communication strategies employed by participants from different degree groups is clearly problematic, due to feelings of inferiority. The structural properties of such communication inform the legitimacy and power dynamics that may be in play.

Feelings of inferiority also stem from the participants use of language in the class, as the participants claim that '*they come with their jargon'* (See Section 5.2.3.1.1). They retorted that when the groups sat in their specified degree groups, the BSc and BA students had their own 'jargon'. It is evident that the interaction between the groups through overt communication strategies is manifested in the structures of signification, where the interactions between participants in this study are mediated by the type of 'language' used. While everything may be English, the context of the communication may not be easily accessible to all. This means that the power language has in this class determines the structures and agency that are developed. Unfortunately, the participants in this study had not developed a sense of agency, where they were able to communicate

these issues, due to feelings of inferiority; therefore, reproducing the current understandings and interactions regarding their classroom differences. This may be one of the main reasons for group isolation in the classroom, as opposed to socio-cultural differences.

While feelings of inferiority were an issue with the participants, they still perceived the randomisation of the groups a better alternative, because they were comfortable giving an incorrect answer to a random group, than when they would have been with their friends. Addressing research question 5, 'What mental traces enable, or constrain cross-cultural interactions in sport studies?' there is clear evidence that some groups of students feel subordinate to others and as a result, they choose not to produce social practices of cross-cultural engagement in the classroom.

7.4.4. Levels of enjoyment

The participants reported on their enjoyment experienced when they played the digital game in the classroom. There were participants who were of the opinion that the digital game did not belong in the classroom, and that there was a preference for a didactic method of teaching. This is not to say that the students who prefer a didactic method of teaching would be disadvantaged. Ilyas, Rawat, Bhatti & Malik (2013) noticed that only a few students achieved better outcomes when using traditional teaching methods, while the majority were unaffected. This goes a long way in indicating to academics that not all students may enjoy new interventions in any given study. It may even lead to arguments about learning styles of students. Garvey and Foley (2012) posit that all students are situated along a continuum of learner differences and, therefore, traditional teaching practices respond to some needs, but not all needs, of students. This, however, was not the opinion of all the participants in this study. Others were of the opinion that it was a good break from didactic methods of teaching. A new method of presenting course content in this study influenced participants' behaviour towards a piece of assessment, thereby creating a new structure. This structure appears to be more influential than the previous structure, which may have been present in their learning. It is important to note that the structure drawn on here is not only active in the participants, since the assessment may also be seen as a structure.

7.4.5. Agency

O'Meara (2013) proposes that graduate students, who have a sense of agency, may feel *au fait* with learning and pursue work that they may deem meaningful to them. Although all students have agency on one level or another, students are able to navigate well through challenges and opportunities that may arise in their learning space. With regard to their experiences of using emerging technologies in the classroom, the participants offered accounts that were inextricably linked to agentic learning experiences. There was a sense of understanding that the games were not invented in order to teach the content. Students were keenly aware that engaging in the game meant that they needed to have some understanding of the content, before they would be able to play the game. The participants' understanding of this suggests that they came into the social system with agency. Additionally, it is indicative of the prior knowledge required in order to play the game, thereby affirming the social constructivist nature of the intervention. Therefore, as knowledgeable agents, they were able to take responsibility for their own learning using a digital game.

They could also use the game to prepare for upcoming assessments. The participants acknowledged the need to take responsibility and ownership of their learning. Wimpenny and Savin-Baden (2012) found that agency is expressed along a continuum of behaviours, reflecting attitude and compliance with expectations and norms, to behaviour that challenges, confronts or rejects, and can be constructive. There is also a sense that agency is developed because of maturity. The participants acknowledged that they were expected to engage in self-directed learning activities and to self-study. As an additional learning tool, the digital game offered easier and flexible access to their learning material.

It is apparent that this study supports communal and social connection among students and tutors toward, as well as increase, agency and a reduction in students' conceptions of isolation and alienation (Wimpenny & Savin-Baden, 2012). Edwards (2007) suggests that, to a certain extent, when material artefacts are loaded with intelligence of others, it could enhance student performance. This author further asserts that practitioners should ensure that clients have access to resources, when navigating problems in practice. Therefore, agency is crucial in explaining engagement with material artefacts, as it would require independent action, when accessing relevant resources.

7.5. Summary of discussion through the lens of Structuration Theory

The discussion presented above was interpreted through the lens of Anthony Giddens' Structuration Theory, which posits that structure is linked to agency, and that structure is a set of rules and resources that are recursively implicated in social reproduction of social systems (Giddens, 1984). In this current study, the social system previously observed in the classrooms, was one where very little cross-cultural engagement was present.

Section 1 of this discussion chapter unpacked cross-cultural interactions in social institutions, as they related to sport studies students. In Section 7.2.1, Group composition, seating preferences, interaction and engagement, levels of engagement and group activities while using the game was presented. The findings of this study in relation to cross-cultural interaction suggests that the unintentional manner in which students organised themselves into homogeneous groups, suggests that prior to the intervention, their actions were enabled and constrained by structures through their independent choices of seating preferences. Although it is noted that similar class schedules facilitated the formation of cultural clusters, this is underplayed by conscious decisions to form groups based on the strengths of individual group members.

When exploring these structures in isolation, the propensity to form groups, based on their strengths, indicates that students will seek out knowledgeable others, despite being knowledgeable agents themselves, and allocate resources (group attributes) that iteratively produce structures of legitimation, as it determines their performance in group assessments, in a stronger group, implicating sanctions when these actions are not applied. The unconscious, unintended and unwitting manner in which homogeneous groups are presented is indicative of the mental structures that have shaped their interactions with peers from various cultures. Giddens (1984) contends that people follow rules through a collective knowledge, which creates conditions for social interaction. As knowledgeable agents, people normally do not know what they are doing at any given moment, but why they are doing it. Therefore, linked to group compositions, it is clear that as individuals, students have formed allegiances with academically strong students, or groups of students. Since there is evidence about what this group comprises, it makes sense that forming allegiances also recursively affects cross-cultural engagement. Therefore, the dominant norms challenge the production of new structures, as the

interactions/behaviours may lead to disproportionate learning opportunities for those outside stronger groups.

The contradiction of conscious versus unconscious decisions may indicate that the unconscious decisions to form homogeneous groups are affected by conscious decisions, which are inextricably linked to rules regarding interactions and thereby reproducing/reinforcing the existing system. This link indicates that the systems (structures) students draw on, affect their agency (actions) regarding cross-cultural interactions in the classroom.
In Chapter 1, anecdotes were offered regarding the manner in which students organized themselves in the classroom. The seating preferences linked to these actions highlighted some of the psychological and emotional (defence) mechanisms linked to seating preferences, as students wanted to feel acknowledged and accepted (Section 7.2.2). This indicates that students require validation from peers, so that they do not feel a sense of loneliness. This also suggests that students may have self-confidence issues, a mental structure that was also raised, when groups were randomised. Therefore, their seating preferences were linked to their level of comfort with peers. The effect of social practices, observed through seating preferences, has an effect on the social roles adopted by the participants. When they do not feel accepted or acknowledged, an indirect effect on their ability to develop a sense of agency emerges, and impedes cross-cultural interaction.

The ways (rules) in which students produce and cultivate comfortable relationships in seating groups reflect the historical system of segregation along the lines of race. Historical traces of a segregated system, therefore, have had an effect on the minds of students (unintended consequence), which has indirectly affected the students' levels of self-confidence (structure). In addition, cultural cliques in the classroom indicate that the rules underpinned by the duality of structure suggest that the participants have some preconceived ideas about classroom activities. The social phenomenon that exists, influences interactions in the classroom, and reproduces the existing system that impedes cross-cultural interaction. The implication of this means that students sitting with peers from their own socio-cultural background suggest that learning and the generation of knowledge is isolated in that group, thereby impeding cross-cultural engagement.

There was no significant improvement on engagement in learning following an emerging technology intervention; however, there was a transformation in cross-cultural engagement,

which has the potential to lead to positive learning experiences by the participants (Section 7.2.4). Following a gaming intervention, through a process of randomisation, students interacted with peers from different cultural backgrounds and further indicated that they would interact with similar groups in the future (See Section 7.2.3). Therefore, the implementation of a digital game created suitable conditions for the transformation of structures that allowed for interactions of cross-cultural engagement, where students could draw on this material resource at any time. A clear shift in group interactions was observed as learning was more constructive and the work ethic improved (Section 7.2.5). It was evident that structures of signification were activated as the modification of interpretive schemes, through group activities, had been embedded in social structure, through a process of communication.

Students, as knowledgeable agents, communicated with one another by expressing their own agency, in order to learn in a flexible way, using social networking applications for study purposes. This is indicative of how students elicit power to communicate as social learners, as they are drawing on material resources, such as social networks, and, thereby, reinforcing structures of domination. The unique usage of social networks, such a wikis and blogs, indicate that human practices with these tools, reinforce the existing system manifested by the lack of interaction, and thereby, not collaboratively constructing knowledge, prior to the intervention (Section 7.3.1). While Baird and Fisher (2006) indicate that social networks provide opportunities for social interaction, the previous structures suggest that the material properties of technology tools may not be deemed relevant to participants in this study and, therefore, they may not have taken an interest in commenting, or editing wikis and blogs. Therefore, there is a link between material resources and the process of structuration.

Linked to group composition and seating preferences, randomization has developed confidence in students. The socialization aspect of group interaction allowed outgoing structures, which were fraught with cultural clustering, linked to confidence and lack of interaction across cultural groups, to be reshaped through the disruption of existing systems in a process of group randomisation. The new appropriate behaviours were marked with confidence and cross-cultural interaction, as discussed in Section 7.3.3. Proximity to peers also suggests that mental traces are linked to segregated ideologies, and, therefore, randomisation of the classroom was a transformative medium, through which rules and resources are drawn on to produce interaction. However, despite gaining confidence through a gaming application, the level of trust in the interaction between peers on a wiki platform was compromised, as the rules in the

technological space had repercussions (sanctions) for the people who used it (Section 7.3.5). The fact that other people could edit their work made students uncomfortable and causing misguided trust issues toward the technology, and not the peers, who may have been behaving inappropriately.

The social constructivist authentic learning environment in this study demonstrated that through interaction, students were able to learn from one another in a multicultural online space, while constructing knowledge, simultaneously. Additionally, despite the authentic learning task being offered as an individual assessment, the community of practice gave them the sense that they were working as a collective, as discussed in Section 7.3.6.

The last section of the discussion was dedicated to interrogating the concept of culture (Section 7.4.1), and how students interacted with peers during the intervention. Much could be interpreted with regard to structures of signification about how students communicated on related matters. While there were mixed perceptions about the topic, one of the central matters raised by students was comfort ones, with claims that they were comfortable and, therefore, engaged with specific groups on that basis. This is linked to Seating Preferences, as discussed in Section 7.2.2 and Group Composition, as discussed in Section 7.2.1. One of the issues raised was that despite language barriers, which may exist, the digital game allowed for acceptance and interaction, even though they did not even know their peers' names prior to the intervention.

The entire structure-agency duo was reshaped and reproduced, as a new understanding of roles has enhanced the level of interaction between multicultural groups. Therefore, social structures of domination are changed because the allocation of material resources (digital game) recursively affected the reproduction of social systems marked by interaction. Another transformative finding highlights the sharing of cultural norms among group members, as they shared values and ideas. Therefore, the interaction that was mediated by a game, transcended invisible cultural barriers, which previously hindered cross-cultural interaction as, discussed in Section 7.4.1. Structures of domination contend that students abide by dominant norms in the classroom, as the power acted on by students facilitated movement through modalities of facilities. These facilities are embedded in the degrees for which students were enrolled that have also produced feelings of inferiority. These structures are linked to power that hinder cross-cultural interaction between groups, which may be linked to power of social orders in the

existing social system of inferiority, thereby producing and reproducing structures of domination, as seen in Section 7.4.3, where Social Science students felt inferior to the Natural Science counterparts. Despite having agency, Social Science students did not have the conviction to communicate effectively with their peers, who were enrolled in a different programme. These actions reproduced the current understanding, and with regard to interactions, related to structures of signification. Despite feelings of inferiority linked to programme isolation, randomisation of groups allowed students to cultivate a comfortable relationship, as discussed in Section 7.3.3.

The affordance of the digital game has shifted the repetitive nature of student interactions over time, as the mental traces that have been embedded over time, have been altered.

7.6. Conclusion

In this chapter a discussion of the findings of this study in relation to the research question and the sub-questions, was presented. The chapter that follows comprises the conclusions and recommendations for this study.

CHAPTER EIGHT

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

8.1. Introduction

In this chapter the researcher, firstly, provides a very brief overview of this research study. Secondly, the research questions are revisited, in order to determine how the research questions, posed at the beginning of this study, have been answered. Thirdly, recommendations will be made, based on the research findings, and lastly the contributions and practical implications of this study to the academia, researchers, practitioners and educational game designers, will be discussed. The limitations of this study, as well as the envisaged implications for future research, will also be highlighted.

8.2. Overview of Research

The aim of this study was to explore the production and reproduction of cross-cultural interactions, critically, using a digital game in sport studies. This was premised on observations that diverse groups of students, who enter the classroom, have a tendency to gravitate towards peers from their own cultural background. The cause of this problem was under-explored, but the thesis of the researcher was that it may be due to expressions of norms and shared values in homogeneous groups, or because of mental structures that were underpinned by historical legacies of segregation. The latter potential explanation was explored as it may have hindered cross-cultural engagement in the classroom.

8.3. Revisiting the Research Questions

The aim of this study was to answer the following research question:

How does the implementation of digital games in the classroom produce and reproduce social practices of cross-cultural engagement in the classroom?

This thesis argued that despite the abolition of apartheid more than two decades ago, sport studies students were still organising themselves in clusters that represented cultural segregation. Because of cultural clustering in the classroom, learning and construction of

knowledge was generated within clusters and was unlikely to be shared across cultural clusters. The students' propensity to organise themselves, unwittingly, in cultural clusters highlighted that everyday social practices were routinized, because it was psychologically reassuring for social actors (See Table 2.1). Therefore, the students' tendency to associate themselves in homogenous cultural groups, as day-to-day social activities, reproduced actions linked to cultural clustering. Cultural clustering is linked to structure, which limits behaviour, although, within these limits, there is an assumption that agents are able to act freely (Giddens, 1987). In this instance, they independently made decisions to form groups that were a reflection of historical segregation. Giddens avers that cultures are largely non-discursive and that mutual knowledge informs how lay actors generate practices, which constitute their daily actions (Tucker, 1998). However, students are knowledgeable agents and are capable of explaining their own actions, which is confirmed by Giddens (1987), who argues that it is characteristic of agents to appraise what they do, as a means of justifying their actions, and that they are able to discursively give account of both, what they do and their reasons for doing it. This is an indication of existing structures that facilitate the rules and resources, which recursively impact on the social reproduction of cross-cultural interaction in the classroom, for which students are able to account. Structuration Theory provided the overarching framework that offered insight into how students, as human agents communicate and draw on material resources, such as a digital game, to produce and reproduce social structures in the classroom. The following paragraphs revisit the research questions and offer answers, based on the findings of this study.

8.3.1. How does student's prior experience educational experience inform cross-cultural interaction in the classroom engagement using digital games?

The use of digital games allowed student agents to build capacity, which enabled them to reproduce structures that facilitated cross-cultural interaction in the classroom. Students build capacity as they develop self-confidence, while playing the game, which facilitated better interaction with peers in a multicultural group. Giddens (1984) avers that social conventions, linked to customs embedded in culture, are non-discursive and grounded in practical activities that happened in social systems. The development of self-confidence, as an agentic achievement, revealed how structures of domination were produced and reproduced, when students, as knowledgeable agents, used the resources to elicit power for themselves, which informed their social action (See Section 7.2.2). Social interaction, in this instance, was informed by students' self-confidence to interact with peers. Therefore, as Giddens suggests, social action is more that rule-following

conduct, as its outcome is shaped by the differences in power and resources, which people have at their disposal (Tucker, 1998). However, not all students are interested in the use of digital games in the classroom, as some prefer the traditional didactic approach (See Section 7.3.4). Therefore, the use of a digital game did not allow for the production of new structures of interaction in each student. However, consistent with Giddens' notion of 'memory traces', or mental structures, students were sub-consciously, or unknowingly, organising themselves in groups that represented similar cultures.

Bingimlas (2009), however, intimates that traditional learning environments may not be suitable for preparing young learners to function productively in the 21st century workplace. Concomitantly, the evidence has revealed that when students are unsure about course content within the classroom setting, they would seek assistance from knowledgeable others in close proximity of their seating area. This implied that knowledge was generated only in the cultural grouping and not shared across groups, or throughout the classroom, signifying the constraining effect of structures. Giddens (1984) contends that structures are the condition and the outcome of individuals' activities. Therefore, the outcome of learning in cultural groups is that it impedes cross-cultural construction of knowledge. Within an authentic learning space, the authentic context in which the learning took place revealed that real life skills were developed and students gained a better understanding, as well as insight into their peers because there was a community of practice, when working on the wikis (See Section 7.3.6).

The findings highlighted how the participants' prior experience of face-to-face interaction versus interaction with emerging technologies, positively affected the way in which they engaged in a multicultural classroom. This study showed that the use of emerging technologies fostered cross-cultural engagement, by exploiting the richness in diversity within the sport studies classroom, and reshaped the interactions that existed. In addition, the manner in which the cultural clusters engaged, when playing digital games, transcended not only the cultural barriers in the class, but there was also evidence that the interactions could take place outside of the classroom in the future (See Section 7.2.2). With reference to prior educational experiences, as postulated in this study, Giddens (1987) highlights that the nature of agency is related to the historical understanding of structure, as well as agency. In addition, the understanding of social

life, underplays both the history and the learning context in which people interact (Giddens, 1979).

8.3.2. In what way does emerging technologies facilitate cross-cultural engagement in the sport studies classroom?

The affordances of digital games (Bower, 2008) as a tool to foster cross-cultural engagement changed the perceptions of students about learning in a novel way. While the game was based on course content, the intervention of this study was aimed at uncovering social practices of cross-cultural interaction in sport studies. The students felt comfortable entering the learning space at their own leisure, for self-study purposes, as this type of flexibility was welcomed (See Section 7.4.2). Giddens (1984) suggests that practical actions, such as feeling comfortable, create meaning for the agent. These meanings derive from procedures, which students use to interpret what they do and what others do, thereby producing and reproducing structures of signification. This ultimately produces and reproduces structures of domination. The level of comfort expressed, because of engaging with a digital game, is similar to the findings of Mayer, Warmelink & Bekebrede (2013) that students, who participated in a virtual game-based learning environment, felt reasonably comfortable. The digital game also assisted students with formative and summative assessments, because they used it as a benchmark to achieve learning outcomes (See Section 5.3). The use of emerging technologies was also effective, as it provided an efficient way to study large volumes of content. The immersion of students in a real world context facilitated across-cultural interactions, as students acknowledged feeling like part of a group and learnt more about their peers, through a process of authentic learning (See Section 7.3.6). This is also a reflection of the social constructivist-learning environment, as it supports the work of Vygotsky (1978), who iterated that learning is meaningless unless it is perceived socially.

8.3.3. How do various cultural clusters engage with each other across cultural settings while using digital games?

The advantage of a diverse classroom allowed for integration and engagement in a constructive manner. The use of the digital game allowed for a shared understanding of cultural values across a range of diverse backgrounds (See Section 5.2.2.1). Evidence shows that a gamified activity mediated interaction, in a manner that promoted cultural inclusivity. Cultural customs are usually non-discursive (Giddens, 1984; 1987), however,

much of the knowledge of social conventions are grounded in practical activities. Therefore, the digital game, as a social activity, allowed for better cross-cultural engagement in a multicultural setting. Students valued the engaging nature of the authentic tasks and appreciated feedback from peers, when constructing their wikis (See section 7.3.6). Interactions with digital games informs the manner, in which communication is expressed, when engaging with randomised groups, thereby concluding that communication strategies in groups, allow the reshaping of interactions between peers, by drawing on new structures of signification. The importance of communication, for the production and reproduction of cross-cultural interaction, was evident in the sections, which presented group activities, such as students' experience with other technologies, authentic learning, cross-cultural interaction, engagement with content and feelings of inferiority, while using the game. This suggests that students are able to provide information about the meaning that symbolically informs cross-cultural interaction.

8.3.4. What mental traces enable or constrain cross-cultural interactions in sport studies?

There are levels of distrust, when using technology in the classroom, which may be expressed between learner and technology, or between learner and peers. Therefore, it should be concluded that this misgiving about how the use of emerging technologies, specifically a wiki, will influence their interaction with peers in a multicultural online space (See section 7.3.5). Giddens (1990) develops a complex view of agency that is grounded in practical consciousness, trust, rules, resources and social routines. Trust is tied to ontological security, which refers to the belief in the continuity of self-identity over space and time, and the reliability of social life (Tucker, 1998). Therefore, the use of technology, when working in a group, irrespective of cultural combinations, may hinder interaction, as it may have threatened self-identity and self-interest.

Students consciously form cliques in the classroom, based on the strengths and weaknesses of individuals (See Section 7.2.1). This is an agentic action, based on decisions independently and thoughtfully made. While the students' explanations for cliquing was contradictory to previous statements related to their subconscious gravitation toward peers, this shows that their independent choices offer partial explanations for their actions, as indicated by Jones and Karsten (2003). Despite working

in groups, based on strengths and weaknesses, statistically, the evidence presented in Table 6.4, indicates the propensity of learners to sit with peers from the same socio-cultural background. In homogenous groups, therefore, they wield the power that produces and reproduces structures of domination. Therefore, conclusions can be drawn that weaker students may not have the benefits of learning and constructing knowledge from academically stronger peers, if cliques are ever-present. It can further be concluded that conscious and subconscious formation of cliques represents a shared understanding of interactions in groups, when there is no technology intervention to disrupt the status quo (See Section 7.2.1), thereby producing and reproducing structures of signification. The repercussions of interacting in cliques may lead to disproportionate learning opportunities for those outside stronger groups, therefore, inhibiting cross-cultural student engagement.

Feelings of inferiority lead to a weaker expression of interaction between students from different programme groups (See Section 7.4.3). It is inconclusive whether feelings of inferiority hinder cross-cultural student engagement between students in different programmes, since there is no evidence of intimidation or superiority of one group over the other. However, it may be concluded that the lack of interaction between programme groups, informs (invisible) power dynamics in the classroom, which may lead to poor cross-cultural student engagement, thereby reproducing structures of domination. Giddens (1984) contends that rules are inseparable from the exercise of social power. Therefore, unspoken rules about the differences in study programmes and their interaction, also suggest that social science students are abiding by unarticulated rules of interaction, thereby reinforcing structures of legitimation. The mental traces that hindered cross-cultural interaction are linked to feelings of inferiority of some groups, based on their study programme. These traces had an impact on cross-cultural learning in the classroom.

Traces of segregated structures set out by the previous dispensation are evident in students' preference to sit with peers from the same cultural groups. Various reasons facilitated the social phenomenon of cliquing, as students sought out knowledgeable peers within their cliques (See Section 7.2.1). Additionally, mental traces with regard to their preferred groups are linked to the fear that engaging with peers outside of their

preferred group, may compromise their marks, thereby suggesting that social background did not matter as much as progression through the academia.

Mental structures that underlie interactions regarding group work are flexible and, therefore, conclusions may be drawn that by interacting with peers, using a game allows for the development of self-confidence, and ultimately student performance. The use of digital games resulted in a strong willingness to interact with diverse groups in- and outside of the classroom. It can be concluded that the use of digital games fosters cross-cultural student engagement. Classroom discussion may invoke a different form of expression and articulation of social structures in the classroom, for the purpose of cross-cultural collaboration.

8.3.5. How does the implementation of emerging technologies affect interactions in face-to-face cross-cultural engagements in the classroom?

The use of digital games fostered meaningful interaction in and out of the class, as it creates a space to build relationships with peers, from diverse backgrounds, they may not have interacted with before (See Figure 6.2). Therefore, randomised diverse groups facilitate a better learning process, as students have a richer opportunity to learn something new from their peers (See Section 5.3), highlighting how a social constructivist classroom environment, provides better opportunities for collaborative interaction and learning, as supported by Ilyas *et al.* (2013). Digital games, therefore, facilitate a shift in interactions, in a constructive learning manner, thereby facilitating cross-cultural engagement in the classroom. Randomisation of classrooms allowed for better interaction with peers, which is transferable outside the classroom, as it was found that, despite a large majority of students not knowing their peers, after the intervention, there was a willingness to interact with similar groups in the future (See Section 7.3.3). This signifies that the notion of time-space has transcended the dominant social activities in the institutional practices. Consequently, Giddens contends that time-space relations operate in different ways on the level of the individual, as unconscious processes link past and present, and the routinization of everyday interactions, become necessary for ontological security (Giddens, 1981).

The implementation of emerging technologies affected interactions, as the non-traditional approach was appreciated by most students. Furthermore, group work developed a sense of self-confidence, as group interactions allowed participants to

develop the confidence that also invariably affected their performance (See section 7.2.2). This change in social action highlights the power relations, as students draw on authoritative resources, in order to participate in a group and, therefore, develop their self-confidence, to produce and reproduce structures of domination.

Additionally, regarding randomisation, the implementation of the digital games improved work ethic, while interacting with peers to whom they were randomly assigned. In the institutions day-to-day social practices, students sat with peers from their own social-cultural beliefs, however, during the intervention they were not averse to sitting with peers outside their own social-cultural beliefs (See Section 7.3.3).

The use of a digital game allowed students to realise that they needed to take responsibility for their own learning, therefore, the interaction with the digital game developed a sense of agency among students (See section 5.2.4). The authenticity of the wiki task and the use of a blog transformed learning experiences and fostered cross-cultural collaboration (See section 5.2.5 and Section 7.3.6). Therefore, to answer the overall research question, the following response is offered.

8.3.6. How does the implementation of a digital game shape and reshape social practices of cross-cultural interaction in the classroom?

Digital gaming in the classroom allowed an interactive space, which was marked by improved interaction and acceptance in the sport studies classroom. This was done through structures of signification, where communication in a multicultural group setting allowed for the social practice of cross-cultural interaction. Consequently, the digital game facilitated social interaction, as cooperation was required during game-play. It also helped students to learn about their peers' background, as well as the roles of their peers in the classroom setting. Through the augmentation of the digital game with other technologies, opportunities were opened for the entire class to communicate with one another. Therefore, through communication, social practices of cross-cultural interaction were shaped and reshaped, because of engaging with a digital game.

The process of randomisation of groups showed that the use of the digital game fostered self-confidence, which affected student performance, as they were more confident and comfortable to engage with peers. This intervention, therefore, was empowering for students. Additionally, cross-cultural interaction is likely to be maintained, because of

group randomisation, as there was a willingness to continue interaction in the future. Through this process, students were able to build relationships with peers with whom they would not usually interact. Additionally, in randomised groups, students were more serious about learning, than in their usual homogenous groups, thereby reshaping social practices. In a constructivist-learning environment, the use of the digital game promoted collaborative learning. Regarding a social-constructivist authentic learning environment, structures of signification were reshaped, as peers learnt from one another, while, simultaneously, developing skills required for the real work environment.

Digital games allowed for cross-cultural student engagement through interactions that transcended invisible boundaries, which previously hindered cross-cultural collaboration, thereby reshaping structures of signification. The findings of this study indicated that the level of interaction in the informal learning space, allowed for a transformed expression of behaviour towards learning and assessments, in a non-traditional teaching environment.

8.4. Practical Contributions

The following practical contributions are presented based on the main findings, regarding the use of digital games in sport studies, taking into account the objectives in this study, which emanated from the rationale for conducting this study, as well as the approach taken to achieve these objectives.

It was important to explore interactions in this study, due to the mental traces (rules) that informed students' perceptions and understanding of their role in the classroom, based on the 'unspoken' meaning of being in academia. Additionally, Giddens (1984), through his notion of duality of structure, links human actions (interactions) with social structures (the classroom). Consequently, (student) interactions create social structures, and those social structures influence the actions and interactions of students. While conducting a case study with two separate cohorts, using digital games for the fostering of cross-cultural interaction, the findings suggest that there has been a shift in interactions, related to such engagement. The practical contribution is the use of a digital game to foster interaction alone. Additionally, digital games, wikis and blogs were not the only modes of content delivery. Traditional lectures were also offered. Thus, the adoption of a blended learning approach in the classroom is recommended,

as there is clear evidence that, innovative approaches to teaching and learning, positively changes classroom behaviour towards learning.

While structuration theory does not focus on technology (Pozzebon & Pinsonneault, 2005), it was still important to explore the role of emerging technologies in the production and reproduction of social norms, related to cross-cultural engagement. Therefore, it is recommended that the emerging technology tools selected for particular practical intervention, be carefully considered, based on the affordances. This study has shown that the use of a digital game offers a practical alternative to fostering cross-cultural engagement. In addition, the authentic learning task offered on a wiki, allowed for even better and wider interaction, as it did not only allow for interaction in the random groups, but across the entire class. Additionally, an alternative form of engagement with content is offered to students, who do not prefer a technology medium. A careful design of the digital games and other online learning tasks, for the facilitation of cross-cultural student engagement, should be headed, as it may have an impact on the delivery of a blended learning course.

Alanezi (2007) indicated that agents do not just simply follow the system, but engage in processes of making their own decisions. The goal was to understand why students were forming cultural clusters. Ng'ambi (2004, p. 180) suggests that social clustering leads to social exclusion, and linked to a historically segregated society, he claims that students from a previously disadvantaged background, are more inclined to limit informal consultations in clusters of social identity. It is important for facilitators of learning to understand that students have adopted 'rules' that govern their social actions in the classroom and that these actions are recursively reproduced over time. Therefore, when disrupting the dominant/current position, it is also important to allay fears that may hinder the usage of emerging technologies in the classroom. This is important, in order to facilitate a trusting relationship between students and technology, and students with peers, when using technology platforms.

By affording students the opportunity to engage in a real-world activity, allows them to make learning more meaningful and relevant for what they would be required to do outside of the learning environment, as it transforms their learning experience in a more tangible way (Titus, 2013). Sport studies practitioners should make a concerted effort to design learning activities, using principles of authentic learning, in a way that should negate the tendency of students to gravitate into cliques. This also applies to homogeneous settings.

Interactivity and game design are important features, when adopting a gamified approach in the classroom, as it influences productivity levels, as a result of the structure and layout of the game that made learning more flexible and accessible. Digital games foster the development of agency, as the participants indicated that they needed to take responsibility for their own learning. It can further be concluded that agency is developed through the students' pursuit of knowledge, which is fostered by creating flexible access to learning material, through a digital game.

The complexity of social interactions is a result of numerous relations that individuals enter, and which changes historically (Fuchs, 2003). It is clear that randomising groups to reflect the cultural diversity has been met with great success in this study, as it negated the repetitive historical actions of students. Therefore, it is, recommended that randomising groups to foster cross-cultural student engagement, should be taken into consideration.

Implementing digital games, in addition to other emerging technologies, to support the learning environment in the classroom is recommended, as a teaching and learning strategy in the field of sport studies.

8.5. Theoretical Contributions

Structuration Theory advocates "a new way of looking at the relationship between social interactions and the reproduction of the major structural principles in educational settings which characterise society" Shilling (1992, p. 72). This makes the theory a worthwhile framework, as it has a number of idiosyncratic concepts, which are not as restrictive as other sociological theories, while it could be used across disciplines. However, Jones and Karsten (2008) criticise Structuration Theory, as Giddens does not pay due attention to technology, in general. Additionally, Structuration Theory is complex; involves concepts and general suggestions that operate at a high level of abstraction, is not easily linked to specific methods, and is difficult to apply empirically (Pozzebon & Pinsonneault, 2005). This study used emerging technology platforms to provide empirical evidence, and Structuration Theory to offer insight into how students in sport science produce and reproduce cross-cultural interaction in the classroom in a way that would facilitate how they engage in the classroom. Given the high level of abstraction in Structuration Theory, as highlighted by Pozzebon and Pinsonneault (2005), as well as Jones and Karsten's (2008) critique that Giddens largely ignores technology, the use of Structuration Theory allowed for a less abstract, yet critical interpretation of how the

use of digital games by students was operationalized to uncover social practices. Emerging technologies, in particular, were implemented in this study to uncover the structures that informed cross-cultural interaction. These structures were interpreted by the duality of structure.

The proposed theoretical model below has been developed from the findings, which were supported by literature in the field of game-based learning. This proposed model attempts to provide a conceptual exemplar, which may provide the sport science academy with a deeper understanding of a game-based learning environment, to facilitate the production and reproduction of cross-cultural interaction. In addition, the model offers a way of systematically disrupting social structures, which recursively inhibit cross-cultural interaction, to form the desired social structure. For the purpose of this study, a digital game was used to uncover mental structures that constrained cross-cultural interaction.

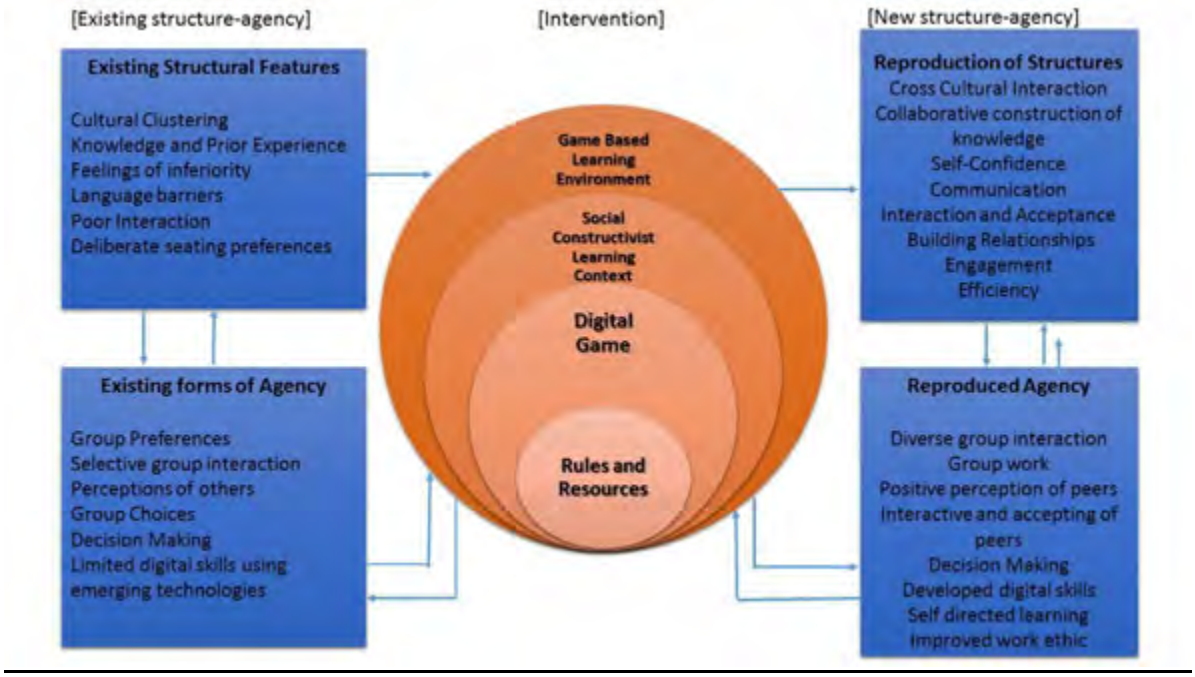


Figure 8.1: Proposed socio-constructivist game-based learning model for cross-cultural engagement.

A context specific social constructivist game-based learning model for cross-cultural interaction is recommended as an instrument to facilitate cross-cultural pedagogy in sport studies (See Figure 8.1). Figure 8.1 depicts the essence of this study regarding the role of a game-based learning environment, in which agents focused on winning a game, played in a social-constructivist learning context, while collaborating with cross-cultural peers. The result

of this cross-cultural collaboration and the result of cross-cultural interaction led to the production of new structures. The findings showed that there were structures that constrained cross-cultural interaction within a cosmopolitan sport studies classroom (See Chapters 5 and 6). The use of a digital game, as an intervention allowed for reflexivity, as knowledgeable agents learnt from their actions and adjusted their subsequent actions, which ultimately informed their social interaction with peers. Therefore, the use of a digital game uncovered the mental structures and enabled the production and reproduction of new structures, which informed cross-cultural interaction.

The aim of this model is to:

- Depict how cross cultural interactions are produced and reproduced
- Explain how rules and resources inform social behaviour
- Describe how agency is identified and explained in a social learning context
- Explain how agency informs social actions of cross-cultural interaction.

This model is viewed through three inter-related components that consider the pre-existing patterns/structures as students enter the classroom, the game-based learning environment and the production and reproduction of structures.

The first component, *Existing structure-agency* as depicted in the boxes on the left, considers the interplay between the existing structural features and the existing forms of agency that impact cross-cultural interaction. These structural features are informed by existing social practices. Over time, students, as knowledgeable agents are able to monitor their experiences reflexively, which also inform their social actions. These existing forms of agency, therefore, allows for the formation and reformation of social action. This creates structures, which organize their social action and, therefore, implicates the production and reproduction of cross-cultural interaction.

Through an intervention, as depicted in the centre as a Venn diagram, the second component of the model, intervention, illustrates the game-based learning environment. These include the following elements;

- A game-based learning environment: The game-based learning environment nests the social-constructivist learning context. The digital game comprises of rules and

resources, which inform cross-cultural interaction and is found in the game-based learning environment.

- Social-constructivist learning context: This context rests in the game based learning environment. In the classroom, it is important to understand the context specific matters that may inform interactions in their classroom. Given that students enter the classroom with prior knowledge, experiences and ideas; this learning context allows for collaborative construction of knowledge. Vygotsky's (1978) work suggests that learning is a social activity. Therefore, within the social constructivist space, the use of wikis and blogs provided a platform for learning tasks to be considered, where students work collaboratively in an authentic learning space.

- Digital game: The digital game resides within the social-constructivist learning context. In this instance, a quiz game was played between random groups. By playing the game in random groups, students were able to familiarise and socialise with peers in their class. Randomisation was critical in this study to facilitate cultural interaction. In this study, the digital game was based on a quiz game that related to the prescribed course reader. In this way, the students could learn course content, using a digital game and, therefore, consolidate their learning about various learning concepts.

- Rules and resources: Rules and resources are part of any game, including digital games. One of the main features embedded in the rules is that of randomisation of the entire diverse class. Therefore, in keeping with the rules of being in a randomised group, students draw on their organisational capacities, also seen as resources, to allow them to play the digital game as a diverse randomised group. Randomisation allows for communication, while playing the game and thereby the potential to reproduce structures of signification by way of example. Without randomisation as a rule for cross-cultural interaction, it may implicate the social power present within groups and result in disproportionate cross-cultural interaction. Material resources in this model also consider wikis and blogs as the emerging technology tools that served as a medium for cross-cultural interaction to take place.

- The last component – new structure – agency – of this model illustrates the reproduction and reproduction of structures, because of the provision of a game-based learning environment. As can be seen from the model, a game-based learning environment positively informs cross-cultural interaction, as new structures are produced, as

evidenced through the display of students' actions. However, social action can only be understood within the context of cross-cultural interaction, and is usually in the form of unarticulated beliefs that students use to interpret their own actions, and the actions of their peers. Therefore, the reproduction and production of agency informs how cross-cultural interaction is manifested in the classroom.

Consider, Figure 8.1, to apply one structure, by way of example. The existing structural feature of cultural clustering is informed by existing forms of agency, namely group preferences. Over time, students group preferences allowed for homogenous group formation. Through the provision of a game-based learning environment, students showed agency by independently making decisions that they would interact with random groups in the future, thereby creating new forms of agency. As a result, this informs the production and reproduction of new structures, which are manifested as cross-cultural interaction.

The above model shows that structures already in existence affect actions manifested in the classroom. Since the evidence highlighted in Chapter 5 and Chapter 6 shows that there is a propensity for cultural clustering, it makes sense that structures are linked to historical traces that informed these actions, despite students not experiencing apartheid themselves. These traces, in the South African context, could be based on the legacies of apartheid, or the recursive actions that are part of students' daily routines in higher education systems. The implications of these traces are that it manifests in a way that impedes cross-cultural interactions. Therefore, through a process of randomisation and the inclusion of artefacts, taking into account the learning context, social actions can be changed. As students are able to draw on material resources, the new attributes of a randomised class informed the development of new constructs and created conditions that were more conducive to cross-cultural interaction. This model was informed by a process of structuration. Like Giddens (1984) duality of structure, interactions inform the structures, which human agents employ in order to produce, reproduce and shape their social realities. This model is specific to the sport studies learning context, however, it could be applied to other learning contexts.

8.6. Further Research

The impetus for this study arose from the need to address the problem of cross-cultural engagement in the classroom. In sport studies, while students were actively involved in lectures

and other co-curricular activities, there still appeared to be segregated social activities that might affect the students' ability to engage with all peers in a multi-cultural classroom. This study critically explored the production and reproduction of cross-cultural interactions, using emerging technologies in sport studies in South Africa, which provided findings, as highlighted in Section 8.4 of this chapter.

More research should be conducted on classroom discussions, as well as inferiority complexes in the sport science classroom, as these could be observed in the interactions, while engaging with emerging technologies. These could be explored using theories in the field of psychology.

8.7. Researchers' reflections of the research process

As a researcher, and lecturer, I questioned my researcher positionality, especially during the two-year period of data collection. As the principal researcher, one of the hardest tasks I had to accept was to abdicate my role as a researcher in the data collection process. Due to the fact, that I am the academic teaching the module, it was advised by the ethics board that I should not collect any of my own data. This made me question, not only my role as a researcher, but also the integrity of the data that was collected on my behalf. I was particularly concerned about the focus groups that were conducted. While I had trained a research assistant to collect the focus group data, there was still a desire to do it myself, so that I could probe, in my own way, since this was essentially my study.

With a background in sport studies and psychology, the use of Structuration Theory was challenging, as the interrelated concepts were abstract and often challenging to articulate regarding this study. I spent nearly 6 months, immersing myself in Giddens work that I allowed it to consume me in a way that helped me to interpret the results of this study, critically. There were times where none of the data made sense and I had questioned many things.

8.8. Concluding Summary

Although the objectives of this study have been met, it is imperative that more research be conducted in the field of sport studies, as well as teaching and learning, specifically with regard to emerging technology, and in particular, digital games.

There is clear evidence to suggest that emerging technologies may foster conditions that allow for the production and reproduction of cross-cultural interactions. The participants in this study had positive experiences while using digital games in the classroom. However, this study concludes that while digital games have a unique set of affordances in this study, it has a much better impact, when it is augmented with other emerging technologies such as wikis and blogs, thereby affirming that no one technology is able to foster cross-cultural construction of knowledge and engagement on its own. This study concludes that the structures of signification, domination and legitimation, from the interaction level to the structure level, have been produced and reproduced because of digital games. Consequently, the process of cross-cultural student interaction that had been repeated over the participants' academic career, has been reshaped and reproduced by using digital games tools, which affected the interactions in the classroom. This practical contribution may allow academics to consider which technologies to use, carefully, in order to get the desired effect in the classroom.

The methodological rigor adopted in this study, to allow for socialisation across iterative cycles of implementation, was a novel approach for the application of design principles, which other researchers may adopt for future studies.

This study also offered a theoretical contribution, as Structuration Theory has not been applied to cross-cultural interaction and digital games. Therefore, this allowed for the interpretation of findings and insights in a new way for teaching and learning in sport studies. In this instance, applying Structuration Theory, Social Constructivism and Authentic Learning to the scholarship of teaching and learning in sport studies, offered new insights into the mental traces that affect cross-cultural interactions.

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APPENDIX A PHASE 1 PRE 2013

Use of emerging technologies for game-based learning in Sports Science Education

Please take a few minutes to complete this questionnaire. Your responses will assist the researcher to better understand how to implement projects that make use of emerging technologies within the department. This project is part of the researcher's PhD and may be linked to publications in the future. Your participation in this survey is voluntary and there will be no negative consequences for you should you choose not to participate. If you do choose to participate, and wish to withdraw at any stage, you will be allowed to do so. No personally identifiable information will be reported, and you will remain anonymous throughout the process. Permission to conduct this survey has been obtained from the Head of the School at UWC as well as the School of Education at the University of Cape Town.

What this is about

Many people have been exposed to games at a primary school level, and as sport science students, your exposure to sport and games have most likely not declined much. At the same time, digital games and the use thereof are common across various platforms. Many console games have been designed for with various sport codes in mind. However, the use of games within the university classroom is not a common occurrence. This survey will establish a baseline understanding of your ability to participate in a gaming for educational purposes. For this survey, game / game-based learning can be thought of as any online game that allow for engagement of students across cultures that allow for the sharing of knowledge.

☐ By ticking this box, I agree to participate in the study. I confirm that the reasons for the study have been explained to me in a manner that I understand and that all of my questions have been answered to my satisfaction.

Section A: this section is about your access to the internet

1. Where do you use the internet most often (you may make multiple selections)?

   ☐Home ☐Campus ☐Internet café ☐Friend ☐Family

   ☐Other (please specify) _____

2. If you use the internet at home, what type of internet connection do you have (please skip this question if you do not have internet access at home)?

   ☐Dialup (you plug the phone line into a modem when you want to use it)

   ☐Broadband / ADSL (the internet is always on)

   ☐3G (you use the cellphone network by plugging a small USB device into the computer)

   ☐3G or WiFi access on a tablet (iPad, Samsung, Acer and others)

3. How often do you use the internet?

   ☐A few times a day ☐Once a day ☐A few times a week ☐Once a week

4. How do you access the internet (you may select more than one option)?

   ☐Desktop computer ☐Laptop ☐Cellphone

APPENDIX A

Section B: This section is about your participation and understanding of digital gaming

5. What is your understanding of a digital game? **-**

   _____

   _____

6. Have you ever played a digital game? ☐Yes ☐No
7. When was the last time you've played a digital game?
   ☐Today ☐In the last week ☐ In the last month ☐In the last year ☐ Never

8. Have you ever played a digital game for educational purposes? ☐Yes ☐No

9. When have you used digital games as part of your studies

   _____

   _____

10. What are your perceptions of digital games for the purpose of learning?
11. Explain <u>how</u> you think digital games may improve your learning experience

    _____

    _____

12. Do you play other types of digital games outside of the classrooms (eg Fifa, ProEvolution, Sims?) ☐Yes ☐No
13. What is the best thing about gaming? _____

    _____

14. What is the worst thing about gaming?

    _____

    _____

    _____

15. What the following words and phrases mean to you (please write *N/A* if you don't know what they mean):

---

1. Wiki _____
2. Blog_____
3. Digital games_____
4. Game-based learning_____
5. Podcast _____
6. Blended learning _____
7. Reflection _____

APPENDIX A

Section C: This section is about your level of engagement

16. Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ I prepare for exams by working with other students

____ I include diverse perspectives (political, racial, cultural etc) when writing and/or presenting assignments.

____ I connect ideas from other courses to prior experience and knowledge

____ I learn something that changes the way I understand a concept

____ I often speak to staff members about my academic performance

____ I often learn by memorising the content

____ I feel that most of my courses are taught in a structured way

____ I often interact with people from diverse backgrounds in the classroom

____ I always review my notes after my class

____ I enjoy interacting with students in my class

____ I enjoy interacting with lecturers in my course

____ I spend a significant amount of my time studying academic work

____ I am provided with enough university support (tutoring, academic support, consultation)

____ I often contribute to class discussions

____ I often make class presentations

____ I often use various resources (books, internet, class notes) to complete a paper or project.

____ I often come prepared to class

APPENDIX A

Section D: This section is about your studying preferences

17. How do you learn best. You may make multiple selections?
    - ☐ Memorising printed text (e.g. handouts, course readers)
    - ☐ When you have pictures (e.g. illustrations, diagrams)
    - ☐ Informal discussion with others (e.g. on campus)
    - ☐ Formal study group sessions
    - ☐ "Cramming" the night before
18. Do you enjoy working in groups? ☐ Yes ☐ No
19. What is the best thing about working in groups? _____

    _____
20. What is the worst thing about working in groups? _____

---

21. Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ I sit with a group from the same socio-cultural background
____ I wish we could have more discussions in class
____ I think that reflection is an important part of learning
____ I struggle to apply theory to practical situations
____ I feel anxious about getting feedback from lecturers on tests and assignments
____ I feel that lecturers in this course are difficult to approach
____ I feel that lecturers in this course do not provide useful feedback
____ In lectures, I often sit with students from my own socio-cultural and/or religious background
____ In lectures, when I don't understand something, I ask the people sitting around me
____ I feel uncomfortable sitting with classmates outside of my socio-cultural / religious background

APPENDIX A

Section E: This section is about your participation in social networks and use of technologies for learning.

22. Which social networks have you subscribed to?

☐ Facebook

☐ Twitter

☐ Mxit

☐ Whatsapp

☐ Flickr

☐ Instagram

☐ LinkedIn

☐ Other

If 'Other' , please specify _____

23. How often do you check it? ☐ Hourly ☐ Daily ☐ Weekly ☐ Monthly

24. What is the best thing about participating in a social network? _____

_____

25. What is the worst thing about participating in a social network? _____

_____

26. Do you use your social network as part of your studying? ☐ Yes ☐ No

1. If you answered *Yes* to the question above, please explain <u>how</u> you use your network as part of your studies _____

_____

2. If you answered *No* to the question above, please explain <u>why</u> you do not use your network as part of your studies _____

_____

APPENDIX A

27. Please indicate which of the following you have performed (you may make multiple selections):

- ☐ Uploaded pictures to a photo sharing service (e.g. Flickr, Instagram,Photobucket)
- ☐ Used on article on Wikipedia to learn about something
- ☐ Edited an article on Wikipedia
- ☐ Watched a video on a video sharing service (e.g. YouTube, Vimeo)
- ☐ Uploaded video to a video sharing service
- ☐ Created a blog post
- ☐ Added a comment to someone else's blog post
- ☐ Read a comment on Twitter
- ☐ Sent a message on Twitter
- ☐ Shared a bookmark on a social bookmarking site (e.g. Delicious, Diigo)
- ☐ Joined a group on a social networking site (e.g. Facebook, MySpace)
- ☐ Played an online game
- ☐ Played a console game (Xbox, Playstation, Wii)
- ☐ Other: specify_____

28. Using the visual analogue scales below, please indicate how you feel when you are working online (the numbers in the scales have no numerical value and will be used for coding purposes only)

I feel confident when I'm online									I feel lost when I am online
1	2	3	4	5	6	7	8	9	10

I enjoy sharing things online									Sharing online makes me nervous
1	2	3	4	5	6	7	8	9	10

I feel excited about using new online tools									I feel anxious when using new online tools
1	2	3	4	5	6	7	8	9	10

I want to learn more about the internet									No thanks, I know everything I need to
1	2	3	4	5	6	7	8	9	10

APPENDIX A

Section F: This section is about teaching within the department

29. Do you find lectures to be an effective way for you to learn? ☐Yes ☐No
30. What (if any) alternatives to lectures would you prefer to be used in the department?_____
31. How do you think that web-based tasks (such as digital games), in addition to lectures, might improve your own learning

    _____

    _____

    _____

    _____
32. What, if anything, would you change about the way subjects are taught in the department? _____

_____
33. What forms of communication with your lecturer would you prefer?_____

    _____

    _____

Section G: This section is about your demographic information

34. Are you ☐Male ☐Female?
35. What year of study are you in? ☐First ☐Second ☐Third ☐Fourth
36. What is your home language? ☐English ☐Afrikaans ☐ IsiXhosa ☐ IsiZulu ☐ IsiNdebele ☐ North Sotho ☐ Sesotho ☐ Setswana ☐ Tshivenda ☐Other
37. What degree are you doing? ☐ B.A (SRES) ☐ B.Sc (SES)
38. What is your ethnicity? ☐African ☐Coloured ☐Indian ☐White ☐Other

Thank you for taking the time to complete this survey. Should you have any questions or comments, please contact the researcher at sititus@uwc.ac.za

APPENDIX B

PHASE 1 POST 2013

Use of emerging technologies for game-based learning in Sports Science Education

Please take a few minutes to complete this questionnaire. Your responses will assist the researcher to better understand how to implement projects that make use of emerging technologies within the department. This project is part of the researcher's PhD and may be linked to publications in the future. Your participation in this survey is voluntary and there will be no negative consequences for you should you choose not to participate. If you do choose to participate, and wish to withdraw at any stage, you will be allowed to do so. No personally identifiable information will be reported, and you will remain anonymous throughout the process. Permission to conduct this survey has been obtained from the Head of the School at UWC as well as the School of Education at the University of Cape Town.

What this is about

During this semester, you were exposed to a digital game based on your sport psychology module. This survey will establish whether participating in a digital gaming environment for educational purposes has the potential to improved your learning

☐ By ticking this box, I agree to participate in the study. I confirm that the reasons for the study have been explained to me in a manner that I understand and that all of my questions have been answered to my satisfaction.

Section A: this section is about your access to the internet

1. During this module, where do you use the internet most often (you may make multiple selections)?

   ☐Home ☐Campus ☐Internet café ☐Friend ☐Family

   ☐Other (please specify) _____

2. During this module, how often did you use the internet?

   ☐A few times a day ☐Once a day ☐A few times a week ☐Once a week

3. During this module, how did you access the internet (you may select more than one option)?

4. ☐Desktop computer ☐Laptop ☐Cellphone

5. For this module, how often have you accessed the internet off campus

   ☐Hourly ☐Daily ☐Weekly ☐Monthly ☐Never

Section B: This section is about your participation and understanding of digital gaming

6. How has your understanding of digital games changed since taking this module? **-**

   _____

   _____

7. Do you feel that you have sufficiently accessed the game? ☐Yes ☐No
8. When was the last time you've played the game?

   ☐Today ☐In the last week ☐ In the last month ☐In the last year ☐ Never
9. Did you enjoy playing in teams? ☐Yes ☐No
10. Did you know your team-mates prior to playing the game as a team? ☐Yes ☐ No
11. What was your first reaction to seeing your group members names?

    ☐ Happy

    ☐Excited

    ☐Uncertain

    ☐ Anxious

    ☐ Nervous

    ☐Not bothered

    ☐ Unhappy

12. Normally, do you enjoy working in groups / teams? ☐Yes ☐No
13. Explain your answer above

    _____

    _____

    _____

    _____

14. Was the team you were assigned to classmates you would normally interact with? ? ☐Yes ☐No
15. Would you interact with the same group in the future? ☐Yes ☐No
16. Do you feel that you have learnt from your fellow classmates? ☐Yes ☐No
17. Would you like more classes to use digital games? ☐Yes ☐No
18. Do you perceive games to be valuable learning tools? ☐Yes ☐No
19. If you marked the above 'yes'. Explain

    _____

    _____

20. Explain <u>how</u> you think digital games has improved your learning experience

    _____

_____

21. What is the best thing about gaming in the classroom? _____

_____

22. What is the worst thing about gaming in the classroom?

_____

_____

_____

Section C: This section is about your level of engagement

23. After engaging with the game and with fellow classmates, please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ I prepared for tests by working with other students

____I prepared for test using the game

____I used the game to revise my work

____ I included diverse perspectives (political, racial, cultural etc.) when writing and/or up my assignment.

____ I connected ideas from other courses to prior experience and knowledge

____ I learnt something that changes the way I understand a concept in sport psychology

____ I often speak to staff members about my academic performance

____ I often learnt by memorising the content

____ I felt that most of my courses are taught in a structured way

____I felt this this course was taught in a structured way

____ I interacted with people from diverse backgrounds in the sport psychology classroom

____ I always reviewed my notes after my class

____ I enjoyed interacting with students in my class

____ I enjoyed interacting with the lecturer in my course

____ I spent a significant amount of my time studying academic work

____ I was provided with enough university support (tutoring, academic support, consultation) during this module

____ I often contributed to class discussions

____ I often made class presentations

____ I often use various resources (books, internet, class notes) to complete a paper or assignment

____ I often came prepared to class

Section D: This section is about your studying preferences

24. Did you enjoy working in groups when you were not playing the game?

    ☐Yes ☐No

25. What was the best thing about working in groups? _____

    _____

26. What was the worst thing about working in groups?

    _____

---

27. Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ During this module I sat with a group from the same socio-cultural background

____ During this module I sat with a group from a different socio-cultural background

____ I wish we could have more discussions in class

____ I think that reflection is an important part of learning

____ I struggle to apply theory to practical situations

____ I felt anxious about getting feedback from the lecturer on tests and the assignment

____ I felt that the lecturer in this course was difficult to approach

____ I felt that the lecturer in this course did not provide useful feedback

____ In lectures, I often sit with students from my own socio-cultural and/or religious background

____ In lectures, when I don't understand something, I ask the people sitting around me

____ I feel uncomfortable sitting with classmates outside of my socio-cultural / religious background

Section E: This section is about your participation in social networks and use of technologies for learning.

28. Using the visual analogue scales below, please indicate how you feel when you are working in the online game (the numbers in the scales have no numerical value and will be used for coding purposes only)

I feel confident when I'm playing the game									I feel lost when I am playing the game
1	2	3	4	5	6	7	8	9	10

I enjoyed playing the game									I felt nervous playing the game
1	2	3	4	5	6	7	8	9	10

I felt excited about playing the game									I felt anxious about playing the game
1	2	3	4	5	6	7	8	9	10

I would like to learn using games									No thanks, I learn quite fine without games
1	2	3	4	5	6	7	8	9	10

Section F: This section is about teaching within the department

29. Did you find the game to be an effective way for you to learn? ☐Yes ☐No
30. What (if any) alternatives to lectures would you prefer to be used in the department?_____
31. How do you think that web-based tasks (such as digital games), in addition to lectures, might improve your own learning

    _____

    _____

    _____

    _____
32. What, if anything, would you change about the way subjects are taught in the department? _____

_____
33. What forms of communication with your lecturer would you prefer?_____

    _____

    _____

Section G: This section is about your demographic information

34. Are you ☐Male ☐Female?
35. What year of study are you in? ☐First ☐Second ☐Third ☐Fourth
36. What is your home language? ☐English ☐Afrikaans ☐ IsiXhosa ☐ IsiZulu ☐ IsiNdebele ☐ North Sotho ☐ Sesotho ☐ Setswana ☐ Tshivenda ☐Other
37. What degree are you doing? ☐ B.A (SRES) ☐ B.Sc (SES)
38. What is your ethnicity? ☐African ☐Coloured ☐Indian ☐White ☐Other

Thank you for taking the time to complete this survey. Should you have any questions or comments, please contact the researcher at sititus@uwc.ac.za

PHASE 2 PRE 2014

APPENDIX C

Towards a Social-Constructivist Game-Based Learning Model: A Case of using Emerging Technologies in Sport Science Education

Please take a few minutes to complete this questionnaire. Your responses will assist the researcher to better understand how to implement projects that make use of emerging technologies within the department. This project is part of the researcher's PhD and may be linked to publication in the future. Your participation in this survey is voluntary and there will be no negative consequences for you should you choose not to participate. If you do choose to participate, you may withdraw at any stage. No personally identifiable information will be reported, and you will remain anonymous throughout the process. Permission to conduct this survey has been obtained from the Head of the School as well as the School of Education at the University of Cape Town.

Many people have been exposed to games at a primary school level, and as sport science students, your exposure to sport and games have most likely not declined much. At the same time, digital games and the use thereof are common across various platforms. Many console games have been designed for with various sport codes in mind. However, the use of games within the university classroom is not a common occurrence. This survey will establish a baseline understanding of your ability to participate in a gaming for educational purposes. For this survey, game / game-based learning can be thought of as any online game that allow for engagement of students across cultures that allow for the sharing of knowledge.

☐By ticking this box, I agree to participate in the study. I confirm that the reasons for the study have been explained to me in a manner that I understand and that all of my questions have been answered to my satisfaction.

Section A: this section is about your access to the internet

1. Where do you use the internet most often (you may make multiple selections)?

   ☐Home ☐Campus ☐Internet café ☐Friend ☐Family

   ☐Other (please specify) _____

2. If you use the internet at home, what type of internet connection do you have (please skip this question if you do not have internet access at home)?

   ☐Dialup (you plug the phone line into a modem when you want to use it)

   ☐Broadband / ADSL (the internet is always on)

   ☐3G (you use the cellphone network by plugging a small USB device into the computer)

3. How often do you use the internet?

   ☐A few times a day ☐Once a day ☐A few times a week ☐Once a week

4. How do you access the internet (you may select more than one option)?

   ☐Desktop computer ☐Laptop ☐Cellphone

APPENDIX C

Section B: This section is about your participation an understanding of digital gaming

5. Have you ever played a digital game for educational purposes? ☐Yes ☐No
   If you answered *Yes* to the question above, please explain <u>when</u> you used digital games as part of your studies_____
   _____
6. Do you think that the use of digital games in the class can improve your learning experience? ☐Yes ☐No
   If you answered *Yes* to the question above, please explain <u>how</u> you think it may improve your learning experience_____
   _____
7. Do you play other types of digital games outside of the classrooms (eg Fifa, ProEvolution, Sims?) ☐Yes ☐No
8. What is the best thing about gaming? _____
   _____
9. What is the worst thing about gaming? _____
   _____

Section C: This section is about your level of engagement

10. Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ I prepare for exams by working with other students

____ I included diverse perspectives (political, racial, cultural etc) when writing and/or presenting assignments.

____ I am able to connect ideas from other courses to prior experience and knowledge

____ I often learn something that changes the way I understand a concept

____ I often speak to staff members about my academic performance

____ The only way I learn is to memorise the content

____ Most of my courses are taught in a structured way

____ I often have conversations with people of a race and ethnicity other than my own.

____ I always review my notes after my class

___ I enjoy interacting with students in my class

APPENDIX C

__ I enjoy interacting with lecturers in my course

___ I spend a significant amount of my time studying academic work

___ The university provides me with enough support (tutoring, academic support, consultation)

Section D: This section is about your participation in social networks and use of technologies for learning.

11. Do you belong to any social networks e.g. Facebook, Mxit, Twitter, Whatsapp?
    - ☐Yes (please answer Questions 6-9 after ticking this block)
    - ☐No (please skip to Question 10 after ticking this block)

If you answered *Yes* to the question above, please answer the following:

12. How often do you check it? ☐Hourly ☐Daily ☐Weekly ☐Monthly
13. What is the best thing about participating in a social network? _____

    _____
14. What is the worst thing about participating in a social network? _____

    _____

15. Do you use your social network as part of your studying? ☐Yes ☐No
    1. If you answered *Yes* to the question above, please explain <u>how</u> you use your network as part of your studies _____

    _____
    2. If you answered *No* to the question above, please explain <u>why</u> you do not use your network as part of your studies _____

    _____

16. Please indicate which of the following you have performed in the past month (you may make multiple selections):
    - ☐Uploaded pictures to a photo sharing service (e.g. Flickr, Instagram,Photobucket)
    - ☐Used on article on Wikipedia to learn about something
    - ☐Edited an article on Wikipedia
    - ☐Watched a video on a video sharing service (e.g. YouTube, Vimeo)
    - ☐Uploaded video to a video sharing service
    - ☐Created a blog post
    - ☐Added a comment to someone else's blog post
    - ☐Read a comment on Twitter
    - ☐Sent a message on Twitter

APPENDIX C

☐Shared a bookmark on a social bookmarking site (e.g. Delicious, Diigo)

☐Joined a group on a social networking site (e.g. Facebook, MySpace)

☐Played an online game

☐Played a console game (Xbox, Playstation, Wii)

17. What the following words and phrases mean to you (please write *N/A* if you don't know what they mean):
    1. Wiki _____
    2. Blog_____
    3. Digital games_____
    4. Game-based learning_____
    5. Podcast _____
    6. Blended learning _____
    7. Reflection _____

18. Using the visual analogue scales below, please indicate how you feel when you are working online (the numbers in the scales have no numerical value and will be used for coding purposes only)

I feel confident when I'm online									I feel lost when I am online
1	2	3	4	5	6	7	8	9	10

I enjoy sharing things online									Sharing online makes me nervous
1	2	3	4	5	6	7	8	9	10

I feel excited about using new online tools									I feel anxious when using new online tools
1	2	3	4	5	6	7	8	9	10

I want to learn more about the internet									No thanks, I know everything I need to
1	2	3	4	5	6	7	8	9	10

Section E: This section is about your studying preferences

19. Do you use the internet as part of your studying? ☐Yes ☐No
20. If you answered *Yes* to the question above, please explain <u>how you use</u> the internet

to study _____

_____

21. If you answered *No* to the question above, please explain <u>why you don't</u> use the internet to study _____

_____

22. How do you learn best. You may make multiple selections?
    - ☐ Memorising printed text (e.g. handouts, course readers)
    - ☐ When you have pictures (e.g. illustrations, diagrams)
    - ☐ Informal discussion with others (e.g. on campus)
    - ☐ Formal study group sessions
    - ☐ "Cramming" the night before
23. Do you enjoy working in groups? ☐ Yes ☐ No
24. What is the best thing about working in groups? _____

    _____
25. What is the worst thing about working in groups? _____

_____

26. Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ The group I sit with is from the same socio-cultural background

____ I wish we could have more discussions in class

____ I think that reflection is an important part of learning

____ I struggle to apply theory to practical situations

____ Getting feedback from lecturers on tests and assignments makes me feel anxious

____ Lecturers in this course are difficult to approach

____ Lecturers in this course do not provide useful feedback

____ In lectures, I often sit with students from my own socio-cultural and/or religious background

____ In lectures, when I don't understand something, I ask the people sitting around me

___ I feel uncomfortable sitting with classmates outside of my socio-cultural / religious background

Section F: This section is about teaching within the department

27. Do you find lectures to be an effective way for you to learn? ☐ Yes ☐ No
28. What (if any) alternatives to lectures would you prefer to be used in the department?_____

APPENDIX C

29. Do you think that web-based tasks (such as digital games), in addition to lectures, might improve your own learning? ☐Yes ☐No
30. Please explain your answer: _____

_____

31. What, if anything, would you change about the way subjects are taught in the department? _____

_____

32. Would you like to have more face-to-face contact with lecturers? ☐Yes ☐No
33. Would you like to have other channels of communication with lecturers?
    ☐Yes ☐No
34. If you answered *Yes* to the question above, can you suggest alternative means of communication that you would like to have available to you? _____

    _____

Section G: This section is about your demographic information

35. Are you ☐Male ☐Female?
36. Ethnicity: ☐ African ☐ Asian ☐ Coloured ☐ Indian ☐White ☐Other
37. What year of study are you in? ☐First ☐Second ☐Third ☐Fourth
38. Which degree are you registered for? ☐ B.A (SRES) ☐B.Sc (SES)
39. What is your mothers birthdate (control question)_____

Thank you for taking the time to complete this survey. Should you have any questions or comments, please contact the researcher at sititus@uwc.ac.za

APPENDIX D

PHASE 2 POST 2014

Use of emerging technologies for game-based learning in Sports Science Education

Please take a few minutes to complete this questionnaire. Your responses will assist the researcher to better understand how to implement projects that make use of emerging technologies within the department. This project is part of the researcher's PhD and may be linked to publications in the future. Your participation in this survey is voluntary and there will be no negative consequences for you should you choose not to participate. If you do choose to participate, and wish to withdraw at any stage, you will be allowed to do so. No personally identifiable information will be reported, and you will remain anonymous throughout the process. Permission to conduct this survey has been obtained from the Head of the School at UWC as well as the School of Education at the University of Cape Town.

What this is about

During this semester, you were exposed to a digital game, a blog and a wiki based on your sport psychology module. This survey will establish whether participating in a digital gaming environment for educational purposes has the potential to improved your learning

☐ By ticking this box, I agree to participate in the study. I confirm that the reasons for the study have been explained to me in a manner that I understand and that all of my questions have been answered to my satisfaction.

Section A: this section is about your access to the internet

1. During this module, where do you use the internet most often (you may make multiple selections)?

   ☐Home ☐Campus ☐Internet café ☐Friend ☐Family

   ☐Other (please specify) _____

2. During this module, how often did you use the internet?

   ☐A few times a day ☐Once a day ☐A few times a week ☐Once a week

3. During this module, how did you access the internet (you may select more than one option)?

   ☐Desktop computer ☐Laptop ☐Cellphone

Section B: This section is about your participation and understanding of digital gaming

4. How has your understanding of digital games changed since taking this module? -

   _____

   _____

5. Do you feel that you have sufficiently accessed the game? ☐Yes ☐No
6. When was the last time you've played the game?

   ☐Today ☐In the last week ☐ In the last month ☐In the last year ☐ Never
7. Did you enjoy playing in teams? ☐Yes ☐No

8. Did you know your team-mates prior to playing the game as a team? ☐Yes ☐No
9. What was your first reaction to seeing your group members names?
   - ☐ Happy
   - ☐Excited
   - ☐Uncertain
   - ☐ Anxious
   - ☐ Nervous
   - ☐Not bothered
   - ☐ Unhappy

10. Normally, do you enjoy working in groups / teams? ☐Yes ☐No
11. Explain your answer above

    _____

    _____

    _____

    _____

12. Was the team you were assigned to classmates you would normally interact with?
    ☐Yes ☐No
13. Would you interact with the same group in the future? ☐Yes ☐No
14. Do you feel that you have learnt from your fellow classmates? ☐Yes ☐No
15. Would you like more classes to use digital games? ☐Yes ☐No
16. Do you perceive games to be valuable learning tools? ☐Yes ☐No
17. If you marked the above 'yes'. Explain

    _____

    _____

18. Explain <u>how</u> you think digital games has improved your learning experience

    _____

    _____

19. What is the best thing about gaming in the classroom? _____

    _____

20. What is the worst thing about gaming in the classroom?

    _____

    _____

    _____

Section C: This section is about your level of engagement

16. After engaging with the game and with fellow classmates, please indicate how you

feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ I prepared for tests by working with other students

____I prepared for test using the game

____I used the game to revise my work

____ I included diverse perspectives (political, racial, cultural etc) when writing and/or up my assignment.

____ I connected ideas from other courses to prior experience and knowledge

____ I learnt something that changes the way I understand a concept in sport sychology

____ I often speak to staff members about my academic performance

____ I often learnt by memorising the content

____ I felt that most of my courses are taught in a structured way

____I felt this this course was taught in a structured way

____ I interacted with people from diverse backgrounds in the sport psychology classroom

____ I always reviewed my notes after my class

____ I enjoyed interacting with students in my class

____ I enjoyed interacting with the lecturer in my course

____ I spent a significant amount of my time studying academic work

____ I was provided with enough university support (tutoring, academic support, consultation) during this module

____ I often contributed to class discussions

____ I often made class presentations

____ I often use various resources (books, internet, class notes) to complete a paper or assignment

____ I often came prepared to class

Section D: This section is about your studying preferences

17. Did you enjoy working in groups when you were not playing the game?

    ☐Yes ☐No

18. What was the best thing about working in groups? _____

    _____

19. What was the worst thing about working in groups?

    _____

    _____

20. Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ During this module I sat with a group from the same socio-cultural background
____ During this module I sat with a group from a different socio-cultural background
____ I wish we could have more discussions in class
____ I think that reflection is an important part of learning
____ I struggle to apply theory to practical situations
____ I felt anxious about getting feedback from the lecturer on tests and the assignment
____ I felt that the lecturer in this course was difficult to approach
____ I felt that the lecturer in this course did not provide useful feedback
____ In lectures, I often sit with students from my own socio-cultural and/or religious background
____ In lectures, when I don't understand something, I ask the people sitting around me
____ I feel uncomfortable sitting with classmates outside of my socio-cultural / religious background

Section E: This section is about your participation in social networks and use of technologies for learning.

21. Using the visual analogue scales below, please indicate how you feel when you are working in the online game (the numbers in the scales have no numerical value and will be used for coding purposes only)

I feel confident when I'm playing the game									I feel lost when I am playing the game
1	2	3	4	5	6	7	8	9	10

I enjoyed playing the game									I felt nervous playing the game
1	2	3	4	5	6	7	8	9	10

I felt excited about playing the game									I felt anxious about playing the game
1	2	3	4	5	6	7	8	9	10

I would like to learn using games									No thanks, I learn quite fine without games
1	2	3	4	5	6	7	8	9	10

22. With regard to the WIKI activity and blog postings, Please indicate how you feel about the following statements:

A = Strongly agree B = Agree C = Uncertain D = Disagree E = Strongly Disagree

____ The wiki activity represented something I would do in the real world
____ The wiki activity motivated me to learn more about sport psychology
____ Online blog reflection improved my learning experience
____ Feedback from peers on the wiki improved my final product
____ The length of time given to complete the wiki activity was sufficient
____ I felt anxious about starting the wiki activity
____ I felt confident using the wiki tool after I engaged with the tool (wikispaces)
____ The wiki activity was interesting and motivating
____ I learnt from others while doing the wiki activity
____ The wiki activity made it easy to edit my assignment
____ The wiki activity was stressful

Section F: This section is about teaching within the department

23. Did you find the game to be an effective way for you to learn? ☐Yes ☐No
24. What (if any) alternatives to lectures would you prefer to be used in the department?_____
25. How do you think that web-based tasks (such as digital games), in addition to lectures, might improve your own learning

_____
_____
_____
_____

26. What, if anything, would you change about the way subjects are taught in the department? _____

_____

27. What forms of communication with your lecturer would you prefer?_____

_____

_____

Section G: This section is about your demographic information

28. Are you ☐Male ☐Female?
29. What year of study are you in? ☐First ☐Second ☐Third ☐Fourth
30. What is your home language? ☐English ☐Afrikaans ☐ IsiXhosa ☐ IsiZulu ☐ IsiNdebele ☐ North Sotho ☐ Sesotho ☐ Setswana ☐ Tshivenda ☐Other
31. What degree are you doing? ☐ B.A (SRES) ☐ B.Sc (SES)
32. What is your ethnicity? ☐African ☐Coloured ☐Indian ☐White ☐Other

Thank you for taking the time to complete this survey. Should you have any questions or comments, please contact the researcher at sititus@uwc.ac.za

APPENDIX E

Focus Group guide

1. When you enter into the classroom, how do you decide where you will sit?
    a. On what is this decision based?
2. Do you prefer to sit with peers from your own background? Social, cultural, religious?
    a. If yes, why?
3. Did you enjoy playing a digital game in the classroom?
    a. If you did, what made it enjoyable?
    b. If you did not, why did you not enjoy it?
4. What was your first reaction when you heard that you would be playing and internet based game?
5. What is your opinion about the use of games in the classroom?
6. In what way did the use of games in the class allow for interaction between peers?
7. How did it feel playing games with peers?
8. Do you think that games have the potential to cut across cultural barriers?
9. In what way has the use of the game supported your learning?
    a. If you feel it has not supported learning, why?
10. Did this game allow for better understanding of course content?
    a. In what way do you think it has achieved this?
    b. Would you have had the same understanding of the content if you had normal lectures?
11. Would you like to see more lectures in this format/ using games?

APPENDIX F

Ms Simone Titus (PhD Candidate)

Faculty of Humanities, School of Education
Center for Educational Technologies
Tel: +27 (0) 72 234 3343 Fax: +27 (0) 860 595
E-mail: ttssim001@uct.ac.za or simone.titus@gmail.com
Internet: www.uct.ac.za

INFORMATION SHEET

Project Title: *Towards a Social-Constructivist Game-Based Learning Model: A Case of using Emerging Technologies in Sport Science Education*

What is this study about?

This is an education project / exercise being conducted by Ms Simone Titus from the University of Cape Town. I am inviting you to participate in this research project because you are a possible candidate to participate in the study as a result of enrolled for the sport psychology module at the University of the Western Cape. The purpose of this research project is exploring the uses of games in the classroom whilst also using technologies such as wiki's and blogs. This information will be used to develop a model for game-based learning in sport science education.

What will I be asked to do if I agree to participate?

You will be asked to participate in a project that uses a digital game as well as a wiki and a blog in your sport psychology module. These tools will be used across the 14 weeks of class instruction. In order to collect information, you will be required to complete a survey instruments and be invited to take part in focus group discussion to explore the topic being researched. The discussions will be recorded (audio and video) with your permission. Informed consent will also be required for the survey instruments as well as the blog posts. All data obtained, transcriptions and recordings will be kept confidential and you will remain anonymous. Your participation in the study will make valuable contribution to the sport science education.

Would my participation in this study be kept confidential?

I will do my best to keep your personal information confidential. To help protect your confidentiality, your name will not be used in the data collection procedure. Data will be stored in locked filing cabinets and storage areas, using identification codes only on data forms, and using password-protected computer files. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.

What are the risks of this research?

There are no known risks associated with participating in this research project.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more the uses of emerging technologies and game-based learning in sport science education. More specifically, it will be useful to determine how these tools support learning and enhance student engagement.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify

Is any assistance available if I am negatively affected by participating in this study?

Yes

What if I have questions?

This research is being conducted by *Ms Simone Titus from the Department Sport Recreation UWC* University of the Western Cape. If you have any questions about the research study itself, please contact me at 021 959 2245 or simone.titus@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

The Ethics Committee
University of Cape Town

APPENDIX G

Ms Simone Titus (PhD Candidate)

Faculty of Humanities, School of Education
Center for Educational Technologies
Tel: +27 (0) 72 234 3343 Fax: +27 (0) 860 595
E-mail: ttssim001@uct.ac.za or simone.titus@gmail.com
Internet: www.uct.ac.za

CONSENT FORM

Title of Research Project: *Towards a Social Constructivist Game Based Learning Model: A case of using emerging technologies in sport science education in South Africa*

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

Participant's name…….. Witness.....

Participant's signature……

Date……

___ I agree to be audio-taped during my participation in this study.

___ I do not agree to be audio-taped during my participation in this study.

----- I agree to be photographed for report writing purposes

---- I do not agree to photographed for report writing purposes

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator's Name: Miss Simone Titus
Tel: 021 9592245 / 2350
Email: sititus@uwc.ac.za
University of the Western Cape
Private Bag X17, Belville 7535
Fax: (021)959- 3688

APPENDIX H

Ms Simone Titus (PhD Candidate)

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E-mail: ttssim001@uct.ac.za or simone.titus@gmail.com
Internet: www.uct.ac.za

FOCUS GROUP CONFIDENTIALITY BINDING FORM

Title of Research Project: *Towards a Social-Constructivist Game-Based Learning Model: A Case of using Emerging Technologies in Sport Science Education*

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way. I agree to be audio-taped during my participation in the study. I also agree not to disclose any information that was discussed during the group discussion.

Participant's name……..

Participant's signature……..

Witness's name……..

Witness's signature……..

Date……

APPENDIX I-Pilot

Focus Group 1

Pilot Study for PhD- 31 July 2013

Venue: SRES Boardroom, UWC

ST: okay, so you guys had a bit of an experience now where you using content to play a game. What has your experience been like Uhm doing something completely different?

BA: I'd say I enjoyed it compared to sitting in a class and having to go over it. You are more actively involved. I know personally I don't like to get verbally involved in a class too much but something like this I I can get involved in. I don't like to get too vocal, but that I can get into. I will say that time factor is a bit [mumbles of agreement from group], makes me nervous so I tend to rush through it instead of reading properly, but other than the time factor, it was quite good I think.

ST: Anybody else wants to add their experiences.

NH: The same thing, similar to what she said. Uhm, I don't really speak often in class and I don't really give an opinion in anything, so to have something like that its better especially now you're catering for everybody, the quieter people in class.

SK: And it's a sort of more fun way to Uhm sort of study for the subject.

ST: If you had access to this on your mobile phone like a blackberry or smartphone, would you go onto this at home?

ALL; Yes.

SD: I would

NH: Yes

BA: definitely

ST: And for what purposes

SK: ok it's fun, and also if you have to study for it then ya

ST: like revise?

BA: The fact that it gives you the right answer when you get it wrong also helps you to remember better so that the next time you don't make the same mistake, so the more you play more you gonna get used to the right answer whether or not you get it right, So I think I would also then for study purposes…okay if this was not the complete answer or the correct answer, what was? Coz that's often the question we have a lot. So what was the actual answer we need,

ST: and if you're saying that, you know, 'we don't sometimes know what the right answer is', don't you get that kind of support normally in a classroom

BA: Well generally if you having discussion not always. You'll get certain ideas of what the correct answer is, but if you're in a test and you like have ok, a certain amount of time and I need a certain amount of keywords to get the marks, then ok, what are the specifics that I need. Instead of going off topic which a lot of us do but then not getting the marks. So then, it's quite specific in that it gives you specific key words.

ST: And then, apart from the key words, ito feedback after the test, do you not get that?

BA: we do but the fact that it's after the test defeats the purpose [yaa, yes…agreement by other participants] . So this would mean that you would know the specifics prior to the test. So for example when I study I like to know keywords so that I can elaborate on keywords. SO I remember for example ok, sport psychology= motivation, achievement, so I know ok, certain words are gonna go with that, so I need to know specifics as opposed to having a lot of information.

ST: so it's almost like 'in-time' learning?

BA; There we go.

ST: what would you change about the game

SD: Abbot the game? Yho, more time. I think that time is the most stressful factor

BA; Is there a way for you to change the difficulty level. I know that some games have a difficulty level. SO if I am a beginner, I'll have more time, then when I feel more competent I will go to a medium or strong and then I will have less time or the same amount or more difficulty questions. Then it takes away from the fact that you're nervous because you have to answer the questions . so that when you feel you have a better score or you are competent enough, move onto the next level [sounds of agreement]. Well that would be my suggestion

ST: anything else

SK: one thing could be like to have the same game like for each like 2 sub-chapters in the book for example then you don't have to do the one game for the whole book and you can focus on one one chapter instead of the whole book.

ST: this is how this works actually. So the section that you had was based on chapter o1,2 and 3. So, in the game it will be built in Game 1, Game2, Game 3. Game 4, Game 5, Game 6 and then it'll be Chapter 1 to 3, 4 to6, 7 to 9, so you can go and revise in different chapters and not go through an entire game.

ST: ST, what is…in a normal classroom working in teams or working in groups?

NH: I don't like it

BA: I don't like it either

NH: I don't like working in groups

ST: Why?

NH: I don't know. I feel like I work better by myself. Like all this practical's and stuff that you have to do, I don't like it.

BA: Okay, with practical's it helps to have another person because either way if you're doing a cycle ergometer test you need to have three people there, so you might as well all three do it at the same time.

NH: yes but that's ok but like…

BA: but when you're in class and you have a whole group like we had yesterday. To have of 6 people to come up with one answer. Two people are sort of there, person writing. No one wants to get up and talk say you have that kinda problems. Whereas if you work in partners or alone, you are forced to deal with the question to actually look up the information and then maybe give the report back as a partnership.

SK: goes both ways actually

SD: Goes both ways

SK: because if you are in a team or pairs you can learn from each other.

SD: Share ideas….

BA: how often does that happen?

SK: ok it de[pends now

BA: Are we talking about class specifically or like a task with assignments or just class

SK: class, assignments…

BA: group work

SK: if you have a good group, you can work to together can learn from each other. SO if I am unsure about my answer, we can have a discussion.

SD: yaaaa, share ideals

SK: And as an individual, sooo

BA: the only thing is that you can't say that you are going to have a good group. You as a lecturer you also cannot decide that each group is going to be good, or you are going to divide them up in a way that's equal.

SK: Ya there's that…

BA: so in that way, bigger groups are not as good as like partners or three people. The smaller the group is, the better I think it is.

SD: Ya

ST: So smaller groups

All: Yes smaller groups

BA; if you are gonna have groups

ST: if this game was to be brought into a class and we play in groups of five, would you still have the same opinion regarding working in groups?

NH: yes

BA: I would. You must remember that different people have different personalities. So some people might take the lead, somebody else will be like, OK, they're taking the lead, so I will sit back.

SD: Yaa (agrees)

BA: They'll just keep-p going especially with the time factor. Whereas with the two of us I can ask her ; do you agree with me, what do you think, ok we still have enough time, ok we both agree,ok choose that. With 5 people it's going to be a bit much.

ST: And three?

BA: Possibly could work. I think the cutoff would be at three.

SD: Ja, three

SK: but I was thinking that four would also be ok. Like for example if you do decide you want to study and four people in a group…

BA: Like at home

SK: ja

BA: oh, then that's fine. But she's asking in a class.

ST: The idea behind this stems from the fact that uhm,. Or let me rather ask you the question. When you get into class where do you go sit?

BA: in the front or center somewhere

ST: who do you sit with?

[inaudible mumbles], sounds like, friends, anywhere, people you know

NH: I sit alone

BA: until I get there and I pull her to the front (referring to NH). [laughs]

ST: hmmm, so usually with people you know. And the people you know, do they usually belong… just close your eyes and think about your classroom. Everyone sits with the people they know. Are the people they know from the same cultural-historical background.

BA: No, not always. I know my friend group is quite varied. I can't say for you guys but mine is quite varied.

ST: Saalieg why are you laughing

SD: Uuuhmm, because I would say that ye, I would say that you can see the clicks, I would say. In some classes you see clicks. I mean, in our sport in society class. You can see out clicks. You can see that the muslim boys sit,

BA: oh, is it like that?

SD: You can see the white boys is there. Yes, so I would say you can see, you can see, you can see the clicks ya

BA: but maybe it's your class then

SK: not so much in our class.

BA: I know, mine also. I dunno, maybe because its smaller

SD: I wouldn't say in all of our classes, like that sports in society.

ST: Does it depend on the the size of the class? SO if it's a bigger class you tend to gravitate towards one another more, or if it's a smaller class you gravitate towards one another more?

SD: I think it's just, that is just our friends, That just the group of friends.

ST: mmm hmm

SD: you just stick together

BA: I must say that through our years we've had varied groups. You can see clicks, like who is more prone to be with each other outside of class, you can see that. But that group itself is varied. We don't have just like the muslim boys…really you guys do that? Anyway…

SD: I am not saying that we don't interact with the other students, but we not friends. That's just who they tend to sit with, who they tend to be in groups with, you can choose your group basically.

ST: This is the idea to use technologies wrt groupwork was that as an outsider I noticed that when I walk into a class I am here to teach, it's not about teaching you what I know as well, imparting that kind of knowledge. And what I noticed was that when I walked into the classroom, the black students sat together, the white students sat together, the Muslim boys sat together…and make a noise [laughter]. And people who lived in the same area because they live in the same area and then they travel together. So then what happens in that group, so if Badeeha is sitting in a group because she's got this particular group of friends and she asks 'What did Ms Titus say now again, you know she's always mumbling, what did she say, I don't understand' [laughter]. Anyway, and then Badeeha will explain to her group, but the rest of the class might not also know

BA, NH: aaaaahhhh

ST: So, the knowledge that is generated in the group stay in that group. So you'll find there are really strong groups in class and there are weaker groups.

ALL: nods, yyyaaaarrr, oooohhh

ST: So based on what I said now. Do you think that if I randomize groups that it would change.

BA: That would definitely change

SK: I think, there's two ways to it. Yes it would. But you know some people don't like to be mixed up.

ALL AT ONCE:

SD: But then they are forced to pull their weight

BA: but but

NH: yes but…

BA: You must understand that other than in your classroom, socially, economically or whatever you want to call it, you are gonna have to deal with it anyway. So if you can't deal with it being mixed up in a group in a class, how are you gonna be like in a workplace. You don't have a choice,. So for them forcing a mixture like hat in a class it sort of gets them more open to that m sort of thing. I think it will be better. Then you don't have that thing where you gravitate towards your friends, your comfort zone. It takes you out of your comfort zone and I think that will be better for some people because their personalities don't allow them to excel in the classroom environment.

ST: So you saying it will be prepare them for the outside world

BA: I think so

ST: Uhm, what was your expectation of learning when you came to UWC. Put yourself in your matric boots, when you came in your first year. What did you expect to do?

BA: A whole lotta theory

NH: I thought we were gonna be like lost and on our own. And the one thing that I took away from sort science and I always told everybody else was that sport science was a very close, close, like very very close department and we could always go to the lectures and they always knew your name and they knew your face and they got to know you very very well. Compared to the other faculties, it's so much better here, like there's thousands and thousands of them in one lecture. But at sport science the classes are kept to a certain amount and I think that was the really nice thing about SS. Uhm and everybody else got to know their classmates, we all stuck together and because its SS we got a lot of practical's as well like the hike and it brought the class students together.

BA: I think, Uhm, one of the big misconceptions of when I left matric and when I came here was that it wasn't as practical as I thought I would be, and when I got into theory I was a bit taken aback because I wasn't very academic at all, but as I went along I found more and more there was someone to help you if you were willing to speak up. So if you say, ok you need help with someone, something, you find that person. So for example if I needed help with sport psych I could go to Warren and say Look, I need help, I don't know what is going on and he would say, fine, lets organize something. Whereas at other universities like for example I was at [indistinct 14:12. Sounds like CPUT] for a year, you don't get that generally. No one gives you a timetable, you have to make your timetable, find your classes, make sure you there. If something goes wrong with the web, it's not their problem. So I think in that way, I prefer Udubs compared to other institutes

SD: JA

SK: I don't really know, I thought I was gonna be much harder than it is now.

SD: hmmm

SK It is third year, but I thought it was gonna be much much harder with lots of theory

BA: [laughs], is it not hard enough for you?

SK: not, it's a lot of.

ST: Saaliegh

SD: I think the girls basically said it all

[everyone laughs]

BA: [laughing]you see, someone takes a back seat [laughter erupts], that what I am talking about, you just gonna take the easy way out.

SD: I was just gonna say that my first year out of matric I went to Cape Tech I did a building course there. Like you said it was quite different,. Cape Tech, a lot of strikes, besides the strikes I meant, the lecturers they weren't as approachable and they weren't as helpful so ja, I think here at Udubs the SS dept., like you said it's a very nice dept. and everyone is helpful

ST: So if you found that the institution is sort of supportive. How do you think that the introduction of technologies in the classroom aid your learning? Would you like to see more of it in the class where there is a bit more flexible learning or are you okay with a lecture standing in front?

BA: That's ok to a certain extent, but then to keep the concentration and keep the interest I think the technological thing will help. I am not a technologically advanced, but something like this I can manage which mean it's not that difficult for someone else., but like touchscreen things I don't use at all, but something like this I can use without getting lost. A lot of the, even the websites to begin with, I used to get lost trying to find things, whereas this is quite simple and then also helps to keep the interest in the subject itself because you get excited about it, as opposed to like, oh no I have to go to that class, it's so boring I am gonna fall asleep hat kinda thing, so in that way I think it would be good

ST: So, because you guys are obviously chose sport science for a reason,. So either you played games or sport before you came here. What is your opinion about bringing games into the classroom, it's a sort of non-traditional way of instructing.

SK: I always…

BA; I love games. Anytime

SK: I always say when we have had course evaluation thingies always say try to incorporate like minor practical session [indistinct: 17:07]. I don't have a problem with the theory though, but having a practical would be better

BA: What we need to be careful of though when bringing activities into a classroom the fact that you get clicks, that will sort of hinder the whole process because if you are gonna have clicks sticking to one each other and activities its not going to help much.

SD: Ja

SK; mmmh hmm

BA; But if you make sure it's an integrated group then someone has a chance to work on their strength s to integrate class and get team cohesion that sort of thing, and everyone gets to know each other. So perhaps you have this group this week, and next week you have a totally different group that'll work,, but definitely activities would help a lot I think

ST: And do you think activities activities specifically like this sort of game would allow you better understand course content whether its sport psychology or sport management or psychology.

BA: I think it will because its specific. Uhm and that with certain subjects there is a lot of theory and sometimes you tend to even thought its good information to know and to have, you tend to knot know what is important and what is,. And so you'll have a whole lot of information and say ok out of this, like a complete page, what of this do I need to know for marks, and in that way, the game specifies these are your key words, these are specific questions with the important information to know, so in that way it's quite helpful.

SK: Ja, but ok, sport psychology it's the book, its basic subject. But if you incorporate another subject with it, sometimes you need somebody to explain like why it's like the right answer or why it's different.

ST: Can you explain

SK: For this subject specifically it would be okay, but something's a little explanation for the answer is…

ST: So if you for instance you are doing management and the answer is 'planning" so what is planning and there must be a little blurb about what planning is, or if its rotator cuff injuries then ok, what are the four…

BA: but you can still do that in a summarized form. So the point of it, is that the game helps becuase its ta summarized version of the important info.

ST: hm: do you think that. I think I've asked you this, but just to reiterate. Do you think a game can improve learning

NH: Yes

ST: in what way

SK: its different to the norm. like now there's, now you just study parrot fashion or mind maps,. But in a game it would make it more fun, so you have fun while you learning and your remember it.

ST: And the issue around playing in groups

NH: I think it would be biter if the lecturer choose groups.

SD: ya

NH: I promise you, Uhm, not too long ago when I was sitting gin exercise physiology, and she was like guys come on get into groups and I was like, is it okay if I join your group and they were like, yay a come sit, and I was like, No but how many people and they were like, who cares about the numbers just join the group and. [laughter erupts]. That's the kind of person I am and like afterwards I'll be like, mmmm okayyy [laughing]

BA: but even so, we sat in that group of like 8 people you kept having to say, guys focus, are you reading> who's reading? Do you have the question? Do you understand the question? Whose looking up the answer? Okay, whose gonna speak? Okay guys come on you have to focus. You keep having to go back. So you waste time basically with those types of group. But I think getting games into a class is good because ..

NH: It keeps you motivated

BA: It incorporates more sentences. I feel when I study I've gotta ready, highlight, and hear it and so that when I have people tell me and I'm reading and I'm colouring it in I activate myself with more senses. So by playing the game and incorporating more information, you tend to learn it easier because well I'm practical so I learn better that way. For someone who is academic, lectures might be better.

SD: like first saying I think that the group size plays a big role

ST: It sounds like a laborious, labour intensive task to work in groups

BA; It is

ST: it seems like you don't have a positive experience

BA; never

ST: you seem to be laughing about it

BA; look you have to make it work,. Either way you have to make it work. So whether or not you finding it difficult at the end of the day you have to make it work. So in the end, I will be ok, I will be that person who will shout and scream to make sure everyone's together.

NH: For me its effort though.

BA; It is an effort

NH: it’s an effort to phone someone up and be like ok what time are we meeting and then its, oh sorry I can’t stay because I have to leave at this time. That's why I just prefer working on my own.

BA: it’s inconvenient

NH: Ja, I can do it in my own space, in my own home, like work on my own assignment do my own park, it’s just convenience.

ST: SO if we put this game in class and we say, look the game will work on three platforms, my platform as a lecturer, your platform as a group and I assign something to you as an individual as well. So as a group you can log in only in the classroom but you won’t need the integration outside the classroom. You can login at your own free will wherever you want to if you want to revise or whatever, I will go in in the background and see ok, Naathira is login in to this chapter, I wonder why, does she not know something so I can then come in to class and say hey, what is it that you need to know…da da da

BA and all: yes that will work

BA; in that way you can see that a person is not hiding behind a group they actually know what e=they doing or struggling with whatever.

ST: I think that that’s it. Is there anything else you want to share with me.

BA: When will this be incorporated? I would have been good to have this when I was in the class.

APPENDIX I

Phase 2

All current quotations (76). Quotation-Filter: All

_____

HU: Qualitative Data Analysis Phase 2
File: [C:\Users\Simone\OneDrive\Documents\PhD\Qualitative Data Analysis Phase 2.hpr7]
Edited by: Super
Date/Time: 2015-05-24 22:17:08

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BP 2:T1- 2:1 [he very first time I started t..] (3:3) (Super)
Codes: [Agency] [Benefits of gaming] [Enjoyment and intrigue] [Novelty and Innovative]
No memos

he very first time I started to log in which means I didn't use it at all, I just studied from the textbook and the second time I logged in and I actually found it enjoyable…you did find it enjoyable…ja I learnt a lot…ok…I think doing it as a group made it interesting…ok…so it's more enjoyable doing it as a group than doing it as an individual?…ja…and it helps the studying as well….I used it yesterday studying for a test…it did help hey… ja…it's more interactive, it's more interesting as opposed to just reading words and page and you actually getting to know if you're right or wrong…you get the right answers, so it's easier to learn…and because we're youngsters I think the technological aspect of it makes it more interesting than doing things in class

BP 2:T1- 2:2 [so what you are trying to say ..] (3:3) (Super)
Codes: [Benefits of gaming] [Enjoyment and intrigue] [Feedback]
No memos

so what you are trying to say is it's better to do it by using the game rather than someone standing in front?…ok…not necessarily…I like it when people explain things to me as well….ok…so you want the image of both?…ja I guess…ja ok…but are there any particular aspects that you think that make it more enjoyable…if you can specifically employ that it is because of ABCD?…I think because you get your answers at the same time like with the test that we usually do, we don't get like what is wrong and right… you just get marked and your test is given back to you, so you kind of have a memo of understanding of what you're doing…ok…so it's because I mean immediately you do get a response rather than a test that you need to anxiously wait for your mark

BP 2:T1- 2:3 [I just wanted to say something..] (3:3) (Super)
Codes: [Disadvantages of the game] [Recommendations for future use] [Structure-meaning]
No memos

I just wanted to say something about maybe the disadvantage of the games; because of the time limit, you feel pressurized when you kinda like…you don't think properly and you get the wrong answers sometimes…I just thought about it yesterday when I studied the work and I did answer, but because you have to read so much, by the time… you don't work as well…ok…so you are trying to find the correct answer yet at the same time…the duration…I think that's where the whole aspect of…that's where the competition is…you need to think fast…I think some of the questions are way too long; you hardly get to finish reading the question and the time's run out; I mean some of the questions are really long and it goes into the answer, so you can't get a chance to even read the answer before the time's up; and the points system is useful if it was actually reflected, but they have some kind of point system relative to the time, but you can't tell in a game how much you've got right or how much you've got wrong at the end; you don't know if you've got three wrong or four wrong or five wrong because there is no summary of it at the end of the game

BP 2:T1- 2:4 [Some of them…some of them are ..] (3:3) (Super)
Codes: [Recommendations for future use]
No memos

Some of them…some of them are too long…ok and then the point system also would be… the point system would be more useful if it was simpler and if it was something like thousands…fifteen thousand… you don't know what it means and what it has to do with the time…ok… and even if you could add maybe a table stating ok group one; you must sort the group; so group one's points are… group two on top…group three…so that it becomes more interesting

BP 2:T1- 2:5 [there must be a reward…ok…so t..] (3:3) (Super)
Codes: [Need for reward]
No memos

there must be a reward…ok…so that you know that maybe group one is the best…ja…for the past two weeks or so group one has been at the top…so that will motivate other groups to work on that system as well while they study to try and beat them…

BP 2:T1- 2:6 [I think it gave a different co..] (3:3) (Super)
Codes: [Benefits of gaming] [Novelty and Innovative]
No memos

I think it gave a different component because none of our other subjects have it; it was like something new; something different…ok, for me it was interesting; but I think firstly when you introduced the game it should be described…immediately, because you're giving a person a different perception so my perception of gaming to his is different according to what game I play; now you're getting a…say you have a perception of a ….game…then you get a wording game, so it can drop your "whatsename" of the game…you're less excited ja…so that could negatively affect you to go and play the game afterwards

BP 2:T1- 2:7 [.I didn't know what to expect ..] (3:3) (Super)
Codes: [Enjoyment and intrigue] [Technical problems]
No memos

.I didn't know what to expect because I'm not one for playing games on computers and stuff, but it was frustration because I could not log in, but eventually when I got in I saw what is this; but it's very easy and it's very exciting

BP 2:T1- 2:8 [In Physiology and Anatomy it w..] (3:3) (Super)
Codes: [Suggestion for other modules]
No memos

In Physiology and Anatomy it would be useful as because then you can actually get diagrams of the body where you have to locate muscles and tendons; it will be useful, because in class it's not visual enough, it's more word related, so if you do the game with images, I think it would be easier to learn the material…ja there are so many diagrams bones, muscles and stuff… I do relate to what you're saying…so that you know what the greater…is… it's much easier that way…I've experiences with gaming for Kinesiology…from my first year there's a game online that actually helps you because learning bones, learning muscles for playing the game every day actually it helps you…it

becomes a data basis so it becomes natural in your mind, so that's actually an important thing that you could use in other subjects.

BP 2:T1- 2:9 [this will help a lot with the ..] (3:3) (Super)
Codes: [Playing in a group] [Suggestion for other modules]
No memos

this will help a lot with the first semester you know there's a lot of work…ok, it makes it more interesting, it summarizes the work for you…about the usage of games in the classroom, would you rather prefer doing the games during your own time or say just thirty minutes we do the lecture, then the other half we do the games during class or during your own time or what? I think that we should like take half an hour half an hour like that…point out to the lecturer fifteen minutes do the questions first because then you might not understand it by just giving the answer but you still don't know… just parrot fashion… then you ask the lecturer something different…ok…explain it to me because it's better if I understand it… the theory and stuff behind it…sometimes just beneficial to get an answer in order to understand it…for me I didn't enjoy doing the games as a group because one person's operating the computer that's been shared by six people, which means one person is answering and not all six because people lose interest, because with one person operating the computer no one else in our group really participated in answering; so I think the game is good individually and if everyone had a computer and we were like the… games each other, it would be more interesting, because you would constantly be competing against people in the class, but when there's no results and where there's no levels or you can't get higher or get lower or being compared to anyone else it just becomes repetitive and not really interactive

BP 2:T1- 2:10 [Then how does it help in terms..] (3:3) (Super)
Codes: [Benefits of gaming] [Domination] [Interaction] [Retention of infomation] [structure- social background] [Structure-meaning]
No memos

Then how does it help in terms of interaction I mean with other students with the lecturer and with the knowledge? I think sometimes it causes conflict because I would say it's one answer then someone else would say it's another answer then we could argue then that person just presses anything that's operating the computer…you get it wrong either way…so it could cause conflict within the group…ok he's saying it causes conflict at times…I did not experience it. At one stage I sat with two people and at another stage I sat with four, five people and the different people would point out answers, so each one had an opportunity to give an answer. I didn't experience any negativity in the group. Ok, so this conflict, does it help you in terms of getting along with each other…it also helps us getting to know each other because half of us does not even know one another's names…it helps us to get to know one another. I think also the aspect of respect plays a role because you judge yourself on what you are not on what others are…for all in education so in my group I experienced it…maybe I think now that this guy is not clever, then he actually shows me that he's answering things that I don't know, so he gives answers and it actually helps you, so if you answered wrong and he answers right, it helps you get the right answer and it helps you communicate with people, so it could be a positive too in that aspect. I think it also helps when we get to write tests, because then you can … because if we are doing it right now, then when you write you must always remember that …she said it's wrong, I said it's right…you actually recall that…because it sticks in your mind…co-operation and helps each other to think quickly, also especially with the games and so on…ja, you say because of the time aspect of the game we can make things quicker, so at least we can build a strategy…you know how to approach on how to use your time.

BP 2:T1- 2:11 [You can continue…ok…because yo..] (3:3) (Super)
Codes: [Retention of infomation]
No memos

You can continue…ok…because you have such a short time limit to do it, so you're actually just memorizing the words, so when I play that game it's all about memorizing, it actually helps me with memorizing multiple choice questions, even in Psychology any multiple choice if I see it one time I remember it for life, but I don't know theory behind it, so that could be a negative effect on it because you memorizing the words; if I see distinctive something then I remember what the first line was and then automatically it stores, but there's no theory behind it in my mind. Because it is rote learning so to speak…it makes you cram

BP 2:T1- 2:12 [Ja…It helps you remember what ..] (3:3) (Super)
Codes: [Benefits of gaming] [Disadvantages of the game] [Retention of infomation] [Structure-meaning]
No memos

Ja…It helps you remember what you saw…the main thing with multiple choice, recognizing what you've seen…but if you study the information it's much easier to detect the right answer…but maybe in the gaming system if you rate it more, it would help you like for instance if you have a multiple choice question, it's based there and you answer your multiple choice question, but further on in the game it's more if you take it more into a gaming base you maybe get a bigger answer or bigger description of what you've just read. That's with the game I did on the bones and that, so it will ask you about bones and afterwards it gives you a definition; somewhere in the game it tells you ok, it's the humerus, it's this part of your body, this this and that so that could actually give you the knowledge that's required. So it's not just a parrot fashion but it also helps you then working on theory base. I am in agreement with what Matthew said; you need to know information before you go and play the game, because then you'll be guessing; you'll be doing it ten or twenty times and eventually getting the answer because of doing it, but you still won't know the work.

BP 2:T1- 2:13 [So you need to study to have a..] (5:5) (Super)
Codes: [Agency] [Benefits of gaming] [Retention of infomation]
No memos

So you need to study to have a proper understanding; be in the lecture, attend the lecture, understand the work before you actually play the game. Otherwise it won't mean anything…ja, because if you just play the game it's like as if you are going to play to engage in a competition…so you need to study first and then to assist you with whatever you gain through your studies, playing the game also…but the thing with that is it can still have that defect because when you say you're preparing for multiple choice questions with that game, that's the essence of this subject, so for me, I don't need to study, because I can go to the game

BP 2:T1- 2:14 [I think the nature of our clas..] (5:5) (Super)
Codes: [structure- social background]
No memos

I think the nature of our class is that in a few of our classes people stick to the same group and it co-incidentally happens to be….but it's not…people haven't intentionally done it but subconsciously you end up with the same people, which I also agree is wrong, so I think it's nice that for this subject you have put us in groups for specific projects and you get to know other people in the class.

BP 2:T1- 2:15 [For me it's not about colour, ..] (5:5) (Super)
Codes: [Domination] [Structure-meaning]
No memos

For me it's not about colour, it's about people who you can relate to you, it's about people that you have things in common with…you have a bigger choice…I feel like being in front…I feel like being disruptive then I sit at the back,

if you come late to class and there's only one seat open you have a choice to go and sit in that one seat…ok…I usually just sit with students who can actually contribute to the work like if I sit next to Wendy like she's able to…I'm able to listen to a lecture, understand as she is able to break it down…so it depends on…I sit according to the strengths of the people

BP 2:T1- 2:16 [what kind of background are yo..] (5:5) (Super)
Codes: [Agency] [Domination] [structure- social background]
No memos

what kind of background are you thinking about?..... No, I think because I moved from another province it really does not make a difference…so I did not know anybody when I got here so there's no way that I could actually go……so I feel that…contributed to my life. I stick to the same people because you know it's predictable, you know what to expect, in terms of people you work with, you know their strengths and their weaknesses, so it's easier, there's a group of us that always stick together, because we do the same subjects and we are in all the same project groups, so it just makes sense to stick together because you get to know people more and more, which means you can build on each other's strengths…ok…as opposed to being with people that you know nothing about and you don't know their strengths and weaknesses, so that unpredictability for me is what makes me stay clear of new people because I'd rather work with people that I know and am familiar with and I know what we can delegate and I think it's good to want to stay on the safe side because of what is familiar to you…you choose to be in a comfort zone and you stick to the same people all the time. Like I try and mix with lots of people so because I did not have a laptop, a person could share…I could do the game with her so I was allowed into her space again

BP 2:T1- 2:17 [hat's why we get put together ..] (5:5) (Super)
Codes: [Agency] [Domination] [Playing in a group] [structure- social background] [Structure-meaning]
No memos

hat's why we get put together in life and we can actually draw from one another, so that's part of being a sociable person when you socialize with people, communication is being made more effective and you can learn to lean on other people as you allow them into your space and they allow you into their space…ok so you get support from your friends… not necessarily, but the fact is that if you risk…if you're always teeming up with someone new, is that always a surface level, you're never getting detail …but if you want to go further you can…but sometimes we don't want to go further…….but if you keep on changing from different groups…….but just to gradually… and you become more comfortable with people…it's ok to start opening up gradually, not just halfway, but now and then open up to allow others into your space…I think, like when you say comfort zone, it's …I would say with larger projects and so on I would also try to stay in my comfort zone instead of mixing with people that I don't know because at the end of the day I'm negatively affecting my marks …I just got into another group with someone that I don't know so sometimes it's all about timing also… so it's safe to stay in your comfort zone when you know like this project is very important …instead of just going to other people and trying to socialize

BP 2:T1- 2:18 [Ok. So you actually look at…sc..] (5:5) (Super)
Codes: [Agency] [Domination] [structure- social background] [Structure-meaning]
No memos

Ok. So you actually look at…scrutinize his work ethic…some of us is able to focus on the work so that at the end of the day…….ja, we all have different experiences, he speaks of his own experience, but we can all learn from each other. My perspective of this is I usually sit alone, but if I require something from Wendy during the lecture I go and sit there and if I require something from Cohen or if I just feel ok in this class there's going to be more a discussion group so I'll associate myself with people who I know are going to discuss and that I can feed from so then I'll associate myself with people that I know so if I don't know anyone for instance then it's going to be difficult to associate myself with the group. Now then you'll be an outcast and you'll be alone

BP 2:T1- 2:19 [I just want to share my experi..] (5:5) (Super)
Codes: [Agency] [Domination] [Interaction] [Playing in a group] [structure- social background] [Structure-meaning]
No memos

I just want to share my experience…given my age, it is not easy for me to relate to everybody, especially last year, but slowly but surely, as I allowed myself to enter into other people's presence, I started gaining more confidence and I remember with the one group that I was sitting with there were about four or five and I could give some of the answers, somebody else gave some of the answers and the more I allowed myself into other people's space, I am starting to gain more confidence and starting to feel much better about myself and then it's definitely affecting my performance as well

BP 2:T1- 2:20 [do you think that the games ha..] (5:5) (Super)
Codes: [Benefits of gaming] [structure- social background]
No memos

do you think that the games have the potential to cut across cultural barriers? Yes, it does…at times …yes, like the times when you sit with someone who is Xhosa…you are a coloured…you try to learn some aspects of the Xhosa culture and they in turn try to learn about the coloured way of doing things…peers across the cultural barriers … we're against group discussions with.. and the I think the games allows you to talk to each other about things like that

BP 2:T1- 2:21 [but games that you engage with..] (5:5) (Super)
Codes: [structure- social background]
No memos

but games that you engage with other people, but the game doesn't engage with other people… so it does allow for you to learn about the other…no, because the person next to me is just saying that he thinks it's C…ok…that…ok, it doesn't really affect cultural perspective so because like as Winnie said now it's just about answering a question and that's it so…there's no time, we've got like ten seconds…if there was maybe more time then we could look at someone's perspective of how they are answering the questions …but now it's just answering the question and getting done with it.

BP 2:T1- 2:22 [but in what specific way has t..] (5:5) (Super)
Codes: [Benefits of gaming] [Retention of infomation]
No memos

but in what specific way has the usage of this game supported your learning so far?....to better understand the work like some of us don't really understand when it's paragraphs and stuff so it becomes the,… game, you are able to grasp the little things that you expand about what is going on…quite quick and efficient, I mean if you have to sit down with a book and study you kinda like sit down and study, but if you like argue the game say for ten minutes then I'll do it later for ten minutes…makes it more efficient…efficient ja…in terms of time

BP 2:T1- 2:23 [.I'm not saying it didn't supp..] (5:5) (Super)
Codes: [Disadvantages of the game] [Structure-meaning]
No memos

.I'm not saying it didn't support me in any way, but there are ways that it can improve to support a person like if there is maybe more of a story line behind the game, then it maybe could help me, like what Wendy said now using it's shorter so it's better, but how do you connect all the short dots for instance you have a book of dots you have to connect it up…now connecting it into the whole theory like there's ten questions on one theory, but connecting the dots are difficult, but if it had like a story line where you can answer the ten questions, you answer the ten questions but then it runs into like I said earlier the bigger theory, so then it would actually help me better to understand the bigger theory because if you hit the long …if you study if you just study the game you just play the game and you hit a long question in the exam, then you're lost because you only have knowledge of the short dots, you don't have the connecting dots…you understand what I'm implying…so really what you're saying I think the game would be really helpful if… because what she's done is she's provided a lot of chapters in one game…ok… so if you have a game on aggression, all the aggression questions…then you have a game on team cohesion, all team cohesion questions, but you can actually learn based on subjects, so you can study that chapter in the book and then go on the game to test your knowledge and then you know

BP 2:T1- 2:24 [does the game assist you in un..] (5:5) (Super)
Codes: [Disadvantages of the game]
No memos

does the game assist you in understanding?…interpret what you said…like bits and bits of information is taken out so you don't have a proper view of everything…ok…because it's just pieces all over… yes…would you have had the same understanding of the course if you had normal lectures like straight up lectures, typical lectures where the lecturer in front is just delivering…is it better to have it in the traditional way or is it much better to have gaming also involved? I enjoy it when she is standing in front and explaining…I mean if I'm not at university I can sit in front of my computer and play a game at home and that is something that happens after a lecture, but if I come into a class I want to get something from it…and I must be on my computer then I may as well do it at home, so I think the game is good for individual work, for your own time, not lecture time

BP 2:T1- 2:25 [Ok, so it's good as …I think t..] (5:5) (Super)
Codes: [Agency] [Benefits of gaming]
No memos

Ok, so it's good as …I think the reason why she does it in class is because lots of people don't have their own laptops or they don't make any means of doing anything so somehow everybody gets exposure, if you're forced to doing it in class. I think that is mainly…you can't force someone to learn…if she gives you the games, it is your own responsibility to go through the stuff, you can't force someone to participate because it is almost like you're spoon feeding them

BP 2:T1- 2:26 [Ok…so you have to do it out of..] (5:5) (Super)
Codes: [21st century digital skills] [Agency] [Benefits of gaming] [Novelty and Innovative] [Structure-meaning]
No memos

Ok…so you have to do it out of your own if you really want to learn. But it's the same with lectures also; you are not forced to come to class. I just feel it's like an extra way to help us instead of saying force, just to give everybody extra exposure…some people like Belinda said, you're not a technologist, so it's not easy for you just to go into a computer and to start doing things. I feel in a way she is giving everyone an opportunity for exposure to working via computer to get to the game

BP 2:T1- 2:27 [I think using the lecture time..] (5:5) (Super)
Codes: [Accessibility] [Agency] [Benefits of gaming] [Domination]
No memos

I think using the lecture time, which is I mean that's the education that I'm paying for…to sit on my computer I think it's a waste...I think the games is something good that we can go on further…I think it should be continued but maybe everyone is not as fortunate as the next so internet links…everyone does not always have internet access so even for myself I only played the game mostly when I was in class and then afterwards when I was on campus…so when I leave campus I'm with a problem…I'm lost, so now I can't play the game now so if I don't come to campus from Monday to Friday

BP 2:T1- 2:28 [So if the game could be conver..] (5:5) (Super)
Codes: [Recommendations for future use]
No memos

So if the game could be converted into an app and then from the app you download to your phone it's on your phone for life so you can play from your phone…that could be a major improvement to the game. That's my opinion on it.

BP 2:T1- 2:29 [I understand what you're sayin..] (5:5) (Super)
Codes: [Agency] [Benefits of gaming] [Domination] [Structure-meaning]
No memos

I understand what you're saying about the first lecture, but I don't think they will force access … and also the fact that we all have excuses about why…they're expecting you to be matured and to do self study and as you said about the first year we did computer literacy, sometimes I think some people just don't want to make the effort to go through all the trouble to do the work, so there could be good excuses and bad excuses as to why people don't access or don't try and make an effort; I just think that at this point of the game…you should be able to click on a link … and if you're experiencing problems then I'm sympathetic, but then there should be a person going asking for help; so I mean if it's going to help that you do one class, everyone gets engaged in it; at the end of the day there is always the person who says they don't have a computer, but there's computer labs in the library, so I don't think…even people that don't have access to computers at home …I still think you can come to university and use a computer here, I don't think, I mean I may be sounding harsh, but I don't think that's a good excuse

BP 2:T1- 2:30 [I would say for Sport Science…..] (5:5) (Super)
Codes: [Recommendations for future use]
No memos

I would say for Sport Science… Management as well, because that's my second major and all my work … and I think it could be a help to me because it's a lot of content… it's all theory, there's no practical whatsoever, so if they give us maybe that per week as ……with the review questions if they give us questions like that in Management per week you'd understand

BP 2:T1- 2:31 [Ja, that was interesting, beca..] (5:5) (Super)
Codes: [Authentic Context] [Authentic Learning] [Authentic Task]
No memos

Ja, that was interesting, because then you're finding out something about someone in class…for me you're saying more applied, practical…….What is the experience……I like the word because you are applying, in principle, the theory, in class you're just talking about the theory, but you don't have any…you're not applying it to the

individual athlete, but as soon as…someone in your class and you understand what their weaknesses in their particular sport are; now you have to think outside of the box; you have to think of strategies to try and help that person cope with their difficulties and you're using your theory, but you're also using your creativity which is what, as a Sport Psychologist, you are going to have to do one day; you're going to have to think outside the box and create strategies for your particular

BP 2:T1- 2:32 [WIkki" is that I found a probl..] (5:5) (Super)
Codes: [Authentic Context] [Authentic Learning] [Authentic Task] [Coaching and Scaffolding] [Collaboration] [Prolinged Engagement]
No memos

WIkki" is that I found a problem is that Kyle can log into my blog and edit my work …that's honest…I did mine and Matthew's hey and I had pictures of Matthew; I had pictures of his sprained ankle, of his broken bones and when I went on again like the day Ms Titus extended it to I think three days more and so I went on again and I noticed all my pictures were different; my captions were still the same as Matthew's sprained ankle, but there was a picture of a pony…I don't know how the pony got there…and I had a friend as well, Jason,…someone in the class copied and pasted his whole assignment and made it their assignment, so there was a little problems with it; but Ms Titus said that you must click at the top and you'll get all your work back, so personally…Wendy had to restart hers because they kept on editing hers but like the function…all of us were familiar with the way it worked; just click and everything comes back. I think it needs to be password protected….and I think there should have been two due dates, a first due date where everyone's things had to be up…ok… and then there should be a second due date for comments, because everyone put their's up to get commented on had their blogs copied and pasted; ok that's a good point, I will like copy and paste…so if you had maybe the deadline say for the Friday that your project had to be in you could put it up by Thursday night, not giving people time to copy it or as I say to edit it or change it or anything, then everyone's project is up, then you have a week to comment on each other's project, then you have another date where you then make changes and put your comments, but to…no one wants to put their project out to be commented on because they knew it was going to get changed, so no one put anything out and then you could not comment on anything because they were between projects…reason why people had to wait long to submit…yes, like most of us did it on Word, we kept it on Word, so we copied and pasted it from Word to…and then we changed it to…because otherwise people are copying it and then it is not your work anymore…everyone was waiting up to the last minute but you had to comment three times and make three comments, but you couldn't comment…to get your project done…but besides that, I think the "Wikki" space…it's improvement to our work and to you as yourself, because when you watch TV, Americans are blogging like it's nothing; it's always a blogging process…they're even blogging over funny stuff, but it's communicating with people because communication has changed the world like science has changed the world…transformation…so we are still behind…like they say South Africans are always ten years behind the world, but actually we are improving slowly but surely, but how to do it; it needs to be looked a

BP 2:T1- 2:33 [Ok…like that assignment, the e..] (5:5) (Super)
Codes: [Problems with wiki asssignement]
No memos

Ok…like that assignment, the editing thing was too easy access to copy someone's work, so if we just safeguard it, it would be easier then, because that's automatically plagiarism and then, because if you look at it, it's plagiarism, taking Kyle's work and pasting it in my thing, changing a few words around …then he gets in trouble for it hey, not the person who did the work…because why would he do it…if he has his own assignment and then he wouldn't release his own assignment and put it on his

BP 2:T1- 2:34 [Wendy had to restart hers beca..] (5:5) (Super)
Codes: [Technology Fears]
No memos

Wendy had to restart hers because they kept on editing hers but like the function…all of us were familiar with the way it worked; just click and everything comes back. I think it needs to be password protected….and I think there should have been two due dates, a first due date where everyone's things had to be up…ok… and then there should be a second due date for comments, because everyone put their's up to get commented on had their blogs copied and pasted; ok that's a good point, I will like copy and paste…so if you had maybe the deadline say for the Friday that your project had to be in you could put it up by Thursday night, not giving people time to copy it or as I say to edit it or change it or anything, then everyone's project is up, then you have a week to comment on each other's project, then you have another date where you then make changes and put your comments, but to…no one wants to put their project out to be commented on because they knew it was going to get changed, so no one put anything out and then you could not comment on anything because they were between projects…reason why people had to wait long to submit…yes, like most of us did it on Word, we kept it on Word, so we copied and pasted it from Word to…and then we changed it to…because otherwise people are copying it and then it is not your work anymore…everyone was waiting up to the last minute but you had to comment three times and make three comments, but you couldn't comment…to get your project done…but b

BP 2:T1- 2:35 [actually it's something good; ..] (5:5) (Super)
Codes: [Affordance of technology] [Enjoyment and intrigue] [Technical problems]
No memos

actually it's something good; good experience…I enjoyed it…I struggled with reflections and discussions about aggression, but eventually I got it; I enjoyed the blogging experience; it was difficult for me at first to get in

BP 2:T1- 2:36 [Just expressing my own views a..] (5:5) (Super)
Codes: [Authentic Learning] [Expert Opinion]
No memos

Just expressing my own views and reading other people's views and opinions and learning from them as well

BP 2:T1- 2:37 [I think also about Sport Scien..] (5:5) (Super)
Codes: [Authentic Learning] [Multiple Roles]
No memos

I think also about Sport Scientists, it gives you a greater perspective because you're looking at Sport Psychology, you're looking at the Biology part of it, you're looking at the Sport perspective of it, so it varies your perspective on Sport Psychology so not Sport Psychology, on Sport Science because it actually helps you further because you're doing an injury so that's doing your theory work on Exercise Physiology and then you're working with Sport Psychology, your aggression and that, and then you're working with sport as well so it actually helps you.

BP 2:T1- 2:38 [you learn more about Sport Psy..] (5:5) (Super)
Codes: [Authentic Learning] [Expert Opinion] [Multiple Roles]
No memos

you learn more about Sport Psychology than using the textbook; would you say, compared to the textbooks? Yes, because we were on the computer and if we didn't understand something, you could check on Google…you could have just put it onto the "WIkki"… ok…so the person reading it could understand what you meant as well, but just thinking

BP 2:T1- 2:39 [As I said, just getting on to ..] (5:5) (Super)
Codes: [21st century digital skills] [Affordance of technology] [Authentic Learning] [Enjoyment and intrigue] [Technical problems]
No memos

As I said, just getting on to it…I think in class people don't speak; it's always the same people that speak up and I actually engage in other people and their opinions but blogging, if everyone blogs, you don't have to be shy…so you hear from people that you would never hear from in class…I think it should have been stated more clearly in class that you have to blog; you have to at least put one comment because it's on there…it says on the blogging page that you have to blog, but in class it wasn't stated…it's like class attendance is part of it, so people should then know that ok we have to at least put out something; that would actually push you; although I blogged out of free will, but again technical problems always strikes

BP 2:T1- 2:40 [found the blogging was nice be..] (5:5) (Super)
Codes: [Agency] [Authentic Learning] [Expert Opinion] [Reflection]
No memos

found the blogging was nice because I could read what people thought about the subject, about…like aggression was one of the topics; like Wendy, what she thought, how I disagreed with her, how I agreed with her and what my personal reflection is on it. So it was actually good.

BP 2:T1- 2:41 [Ja, I enjoyed it…I prefer assi..] (5:5) (Super)
Codes: [Affordance of technology] [Authentic Learning] [Enjoyment and intrigue] [Expert Opinion] [Interaction]
No memos

Ja, I enjoyed it…I prefer assignments like that……..I like working in an interactive space because we're human beings and you're interactive, otherwise you're sitting at home doing your own work coming and handing it in whereas this you're working and you're learning from other people as well (not just in your own

BP 3:T3- 3:1 [Yes, definitely; it's differen..] (1:1) (Super)
Codes: [Affordance of technology] [Benefits of gaming] [Enjoyment and intrigue] [Structure-meaning]
No memos

Yes, definitely; it's different; it's very different; it was ok, it wasn't anything special; it was different; ja, but the course was like enjoyable. Ok. But I was doing the right thing. Ja…so what made it more enjoyable? It's like a…electronic…Ok. Yes, the fact that we didn't actually have to read it out of the papers; we had to play a game…So it takes away this traditional thing of where the lecturer always has to stand in front and then start deliberating and then you guys sit there and just listen

BP 3:T3- 3:2 [he first time when the lecture..] (1:1) (Super)
Codes: [Benefits of gaming] [Enjoyment and intrigue] [Structure-meaning]
No memos

he first time when the lecturer told you guys that with this module, there's going to be the usage of games and so forth, what was your reaction to that? I thought she was joking. You thought she was joking ne? Because we don't normally play games in class. Ok. I thought it was a bonus and less work…it makes it more enjoyable; I was thinking the same, it's not as complicated…ok, so there's the games….Ok…it's not too formal like when you're doing the exam….it puts you in an easy mindset; you don't get bored; you have fun when you're playing the games

BP 3:T3- 3:3 [I was working with people that..] (1:1) (Super)
Codes: [Benefits of gaming] [Structure-meaning]
No memos

I was working with people that was playing afterwards?…ok…so you co ordinate…so you can't have that as such for that matter, as it's all different games?…different ball games, so that's why it is also so important to look at what you can link with the game…Ok…but then in what way do you think this game can help you build knowledge in Sport Psych specifically? In terms of Sport Psych playing the game it made the work actually more easier to remember basically because you get so familiar with that type of answer and you see it in the game, so like when you keep on playing the game consistently you get used to seeing the answer, so you…not the answer, the question…and the answer…ja, but I mean, you can't memorize the answer…so, in other words are you trying to say that it makes life easier for you when you cram?…ja, you cram on the one hand and you just play play play play…with the repetitiveness it's going to…Ok, it's not cramming so to speak, it's just repeating

BP 3:T3- 3:4 [my friends and wi fi…but wi fi..] (1:1) (Super)
Codes: [Structure- sit in class] [structure- social background] [Structure-meaning]
No memos

my friends and wi fi…but wi fi is stronger…Oh really? They say the Consul? corner is stronger…and power plugs for…ja, very strong…where you are sitting it's stronger there? Yes…yo…laughter…ok, so this decision about where you sit is firstly wi fi, friends and power plugs…no man you see, sometimes you also get under pressure by the teachers being right in your face…ja…you understand, that's why, if I set in a test venue, I don't sit where the lecturers are, because it makes you…even though you're not doing anything wrong, you still feel that Oh F…laughter…no his presence

BP 3:T3- 3:5 [do you rather prefer to sit wi..] (1:1) (Super)
Codes: [Structure- sit in class]
No memos

do you rather prefer to sit with peers from your own background? Yes…….social or cultural? Very mixed group…so when you sit, it doesn't matter whether you're sitting with the guys…….Ok, but did the use of the games allow you to interact with other people? Yes, especially when we were put into groups…because you don't get to choose…ja, we didn't know the people in the groups…Ok, so because when you are in groups there is this thing that ok, his name is Vuyo

BP 3:T3- 3:6 [Ok now do you think that the g..] (1:1) (Super)
Codes: [Structure- sit in class] [structure- social background] [Structure-meaning]
No memos

Ok now do you think that the games have the potential to cut across cultural barriers? Yes…in what way? Because now you're actually forced to work with someone that is not from your background when you get put into groups, so now let's say for example you're so used to being in a white zone….we had that ja…and then now you get put into groups, now you're forced to be working with people from a black zone and a coloured zone and an Asian zone and you catch my point?….what is your take on that? My take is that it helps because……guys have different mentalities and different groups have different mentalities so it helps you to understand others; how they think and how they prepare…the culture and all that…I think that's proper…you get to make friends because obviously you actually indulge in conversation and stuff and you have to share how……..and what needs to be done

BP 3:T3- 3:7 [Ok, has the use of the games s..] (1:1) (Super)
Codes: [Benefits of gaming] [Enjoyment and intrigue] [Novelty and Innovative] [Structure-meaning]
No memos

Ok, has the use of the games supported your learning? A lot, a lot; especially with the MCQ's; you get recognition…ja, because I notice at times when I go through the answers you see there is a particular trend; you know that everyone is getting the correct answer for question number one to question number ten, and then from number ten to say question number sixteen…and then from number sixteen to number twenty, and then from number twenty to number twenty five there's disaster

BP 3:T3- 3:8 [a, because you see there's a l..] (1:1) (Super)
Codes: [Recommendations for future use]
No memos

a, because you see there's a lot like for me, personally, there's too many MCQ's on one game and then they say you must study say three for a test and then I think that's where say from nineteen to twenty five is where chaos happen because then it's…….Ok, so, so because the first questions are the modules that you did earlier and there was time, and then probably the last question you did there was other pressure…motivation, goal setting and stuff…so it becomes too much for you guys hey

BP 3:T3- 3:9 [A longer time limit…Ok, a long..] (1:1) (Super)
Codes: [Recommendations for future use]
No memos

A longer time limit…Ok, a longer time limit? She must put in less questions; more questions that will come…No man, I think it must be more games, like on each chapter…Ok…that covers the work…one thing that will work is if she introduces the game early…ok…she must find a set up where even though she has mentioned the game like earlier to us, but then the game must be implemented earlier, and not be implemented towards the end of the module…….Ok…so that will help us a lot to get to grips with…ok…I understand, like what you guys say like especially with the MCQ's, it does help ne, ja……..per chapter, because if it is per chapter, then it's not so much and you will get more in your head as well

BP 3:T3- 3:10 [Definitely…ja, most definitely..] (1:1) (Super)
Codes: [Enjoyment and intrigue] [Novelty and Innovative]
No memos

Definitely…ja, most definitely…Then, would you have had the same understanding of the course content if you had normal lectures? It would have been boring…yes…then I wouldn't come to class; and the thing is again then you don't have the opportunity to do it over again; like with the game you can just restart, restart, restart, restart. Once the lecture is done, you can't click a button and say restart. Ja, dis klaar…laughter

BP 3:T3- 3:11 [For me it will be great becaus..] (1:1) (Super)
Codes: [Authentic Context] [Authentic Learning] [Authentic Task]
No memos

For me it will be great because like Wikis, the Wiki was like a very good assignment for me personally because like it helped me with my field of work like because we are sports people we have to make profiles; we have to send it across the world maybe, where you never know who picks you up. Ok…so that helped me a lot you know; it also got me to know like my friend that I interviewed and his history and how he cope with certain things maybe the way he copes I should implement it so that I can also get the full advantage out of the way that he does it…so you are also learning from other peers

BP 3:T3- 3:12 [It was alright, it wasn't too ..] (1:1) (Super)
Codes: [Affordance of technology] [Authentic Learning]
No memos

It was alright, it wasn't too bad, like, because as I said, we had sports people for Rugby? specifically, they do a lot of that type of stuff, so to get used to that and to start say implementing it was pretty good. Ok, so for you guys, especially sports people, it's more fascinating? Ja…Ok…that's a good way, it's better than normal assignments, we just write a whole lot of crap, because you know you can mix it up with some pictures, videos, links, voice notes works;

BP 3:T3- 3:13 [a, but what I also reckon is b..] (1:1) (Super)
Codes: [Authentic Learning]
No memos

a, but what I also reckon is because we didn't also know how the layout and the structure should be sort of; also, we had a lot of other work obviously that's filling up our space and time basically so we had to wait for the weekend.

BP 3:T3- 3:14 [Ok, I understand ok…Most of us..] (1:1) (Super)
Codes: [Authentic Learning] [Authentic Task]
No memos

Ok, I understand ok…Most of us emailed it to the person you interviewed and then you have to wait for him to answer it before you can start your Wiki……..telepathic…….laughter…Ok, do you think that you will be able to apply that work that you do in the Wiki in real life situations? Yes, definitely…I understand he's talking from a sports person's viewpoint; what is your take on that? It will be easier, because you don't have to like; if you want to edit something you can just go online instead of printing and printing every time…it's an easier way of doing an assignment; the same with the actual assignment; let's say for example you are a coach in a team and you are trying to promote one of your star players, you can actually set up a profile for your player, sit down with him and find out exactly his background and his successes and whatever and then you can do the same thing that you did in the assignment with a profile that you're making, send it out to whoever needs it; that's a door open for the player

BP 3:T3- 3:15 [What did you enjoy most about ..] (1:1) (Super)
Codes: [Authentic Context] [Authentic Learning] [Coaching and Scaffolding] [Collaboration] [Multiple Roles]
No memos

What did you enjoy most about the Wiki assignment? Editing other people's profiles, their achievements…Ok. So getting to know each other? That's right…then what did you enjoy least? Typing it. The worst was when we had to redo it….how to upload pictures, because I wasn't here for the lecture; so you didn't know how to upload pictures? No, I had to figure it out. Oh ok. The worst was that people outside your…like if you didn't work on your Wiki, someone else could edit your work. You don't have to go into your profile, anyone can edit it; that was quite annoying; and you don't know who does it…Ja…you can't see…that's why I reckon, for future purposes, no editing; or a password, just for your own good, because I mean, say I'm going to use now a fake name, Bubbles, laughter…say he does now like…he really worked hard on this thing, then I come along and I check, yo, this guy's work is so amazing, and my thing is super crap, then I go to his and I just mess around there a bit, maybe delete

some important stuff and put some pictures there that has nothing, completely nothing to do with…or you cut, completely cut, instead of copying…Ok, I understand, so it's much better using a password. Ja

BP 3:T3- 3:16 [he theory part ja, but not lik..] (1:1) (Super)
Codes: [Authentic Context] [Authentic Learning] [Authentic learning- articulation] [Coaching and Scaffolding]
No memos

he theory part ja, but not like asking the interviewing, you had to implement the theory into what you interviewed, applying it. So it was more complicated? Yes. Ok. But I think it did help a bit, I mean you've got a proper understanding of…because you must be able to understand before you can apply; you can't just write…you have to understand and have knowledge of whatever constructs of what she is talking about and then you try and apply it in life situations

BP 3:T3- 3:17 [the reflection…it wasn't that ..] (1:1) (Super)
Codes: [Reflection]
No memos

the reflection…it wasn't that bad…it wasn't bad but it seemed unnecessary like why……and the other thing is was it fun

BP 3:T3- 3:18 [this is the blog, this is what..] (1:1) (Super)
Codes: [Reflection]
No memos

this is the blog, this is what the blog is about; and the blog should be more introduced in class because no one really made the effort to look at it, it wasn't necessary…it was lots of tests as well, especially for this subject, and I mean with a test like that you're going to forget about the other assignment, especially if it's not reminded. Ok, I understand. I just think, personally, for my end, it was a rush thing, because I don't think it was constructed well.

BP 4:T2- 4:1 [I did actually enjoy it ja…wor..] (4:4) (Super)
Codes: [Playing in a group]
No memos

I did actually enjoy it ja…working in the groups and helping each other and stuff like that yes…working in groups and helping each other out you learn more actually

BP 4:T2- 4:2 [It's a good way of learning…It..] (4:4) (Super)
Codes: [Affordance of technology] [Agency] [Benefits of gaming] [Enjoyment and intrigue]
No memos

It's a good way of learning…It's a good way of learning ne…because I also think from the traditional way of learning things, where the lecturer is always in front and then delivering; at times it's better to do the games on your own as a student

BP 4:T2- 4:3 [Fresh approach…It was a new ap..] (4:4) (Super)
Codes: [Affordance of technology] [Benefits of gaming] [Enjoyment and intrigue] [Novelty and Innovative]
No memos

Fresh approach…It was a new approach ne? I was more excited at first because I heard games; I thought that we were going to be playing games, and then I saw what it was and I was a bit disappointed, but it was actually very helpful the games though so it was a positive

BP 4:T2- 4:4 [now would you have preferred m..] (4:4) (Super)
Codes: [Benefits of gaming] [Interaction] [Reflection] [Structure-meaning]
No memos

now would you have preferred more traditional teaching during the course, like the lecturer standing in front compared to the use of games, which one would you say is…lecturer standing in front and then they teach ne? Can I say a bietjie of both? Ja, a mixture…but I think sorry the games are helpful considering we only have one lecture a week so what you…like where we can't cover a lot of work in a lecture, the games are a good way to make up for it. It's also the games are a good way of showing us how to actually ask a question in a test so, because there's a lot of information that they would just give us in a textbook, and that breaks it up nicely to show what's actually important and how they are going to ask it to us.

BP 4:T2- 4:5 [lows you to engage better?…wit..] (4:4) (Super)
Codes: [Engagement]
No memos

lows you to engage better?…with knowledge, the lecturer and with the other students…does the use of the games allow you to engage with other students? Ja, if you don't know an answer your mate may know the answer…ok, you're engaging mor

BP 4:T2- 4:6 [No, I think Sport Psych sounds..] (4:4) (Super)
Codes: [Coaching and Scaffolding] [Engagement] [Expert Opinion] [Structure-meaning]
No memos

No, I think Sport Psych sounds scarier than what it is, like in the textbook the writing is pretty big and the work isn't as much as I thought it would be…ja, it's a very relatable module, because if you play sports and while you're going through the work you actually like…you can understand it for yourself so it's very relatable.

BP 4:T2- 4:7 [Yes. I don't like reading book..] (4:4) (Super)
Codes: [Engagement]
No memos

Yes. I don't like reading books so so…me neither, and then I had to go and buy the book: I had to buy the book; we're recording…she's saying also because she had to buy the book…ja, I don't have a problem with buying the book, I just thought I could get through the whole module without a book, but I couldn't, so I bought it last week. It is possible to get through it without a book because that's what I'm doing…I'm not a half one – share this with me Darren – I feel like if they put the slides on like any other…and give us more, because reading the slides is like focused and then you can just elaborate with the textbook

BP 4:T2- 4:8 [I'm just worried about exams w..] (4:4) (Super)
Codes: [Benefits of gaming] [Engagement] [Structure-meaning]
No memos

I'm just worried about exams where I have to…because it's not a lot of work when you break it up into texts, ok…but when you have to study for exams, you have to read the whole thing and that could take a pretty long time. No man, it's easy…but aren't they giving us a scope on Friday…are they giving us a scope? Because there is a class on Friday I think. Ja, there is class on Friday. But are we getting our scope in the class? I think you will. Do you think the use of these games are; it helps you to have suitable knowledge?...it kind of…helps with memorising the answers…you're parrot learning but you do kind of remember; you won't remember it off the back, but if you see it you'll remember it….it's kinda like re-affirming your old knowledge…ja, it does reaffirm, so it's good for practice hey?...Ja…I'm sorry to interfere with our recording, but I didn't know personality was coming in last week's test. That caused……..I thought you would disagree…so rather keep quiet…ja, 7, 8 & 9

BP 4:T2- 4:9 [hat makes you want to go and s..] (4:4) (Super)
Codes: [Structure- sit in class] [structure- social background] [Structure-meaning]
No memos

hat makes you want to go and sit by the "corner"? When I'm early I sit at the back and when I'm late I sit in front because there's no more seats at the back. I just sit at the back because I don't like to sit in front. Is it your likes… ja, and that door makes a lot of noise when people come in…because there's only one entrance and exit……prefer the game also and the lecture straight up lectures, no games……how do you choose? I mean no …I want to see what's going on; that's in front ja, and then nobody can disturb me or…I prefer to sit at the back…and when the class starts really early on a Friday and there's only seats in front usually by the time I get there, so that's the only reason I sit there. Ok, I understand that situation. He says he sits in front so I understand that situation…Do you prefer to sit at times with peers from your background…like you would say you know he's from Worcester, I want to go and sit next to him because I also come from Worcester? Does that have any influence in that…Ja, it's like the first thing you come, you want to sit with someone you're comfortable with. I always sit with people from the Southern Suburbs, not in class. So there's always that connection because that guy is from Mitchells Plain and I come from Ceres so you want to go and sit closer to people who are from Mitchell's Plain as opposed to those guys who are comfortable sitting next to each other…ok, but is there, I mean in terms of cultural cross barriers, I mean does it allow you to whatever…in the classroom mainly? Any social/cultural or any religious…is there any influence in the class in terms of religious or cultural…? No, because I think most of the people at UWC have very similar culture, especially in our class, and I don't think it's so much culture as it is who you are friends with

BP 4:T2- 4:10 [I feel it's human nature to co..] (4:4) (Super)
Codes: [Affordance of technology] [Benefits of gaming] [Playing in a group] [structure- social background] [Structure-meaning]
No memos

I feel it's human nature to compete with another person, so when you are in a group playing a game you actually like…,you choose your answer with someone and then it's always like a reward being right, that's like the…that's why I like the game, because I like being right and I'm always right so…ok, because there's that competitive nature of the games…ja,….ok, so do you prefer playing the game alone or as a group or with other people? I don't know…a mixture of both the games…in class I would do it with groups, but when it comes to studying, I want to have the game to myself. You're more focused when you are alone because nobody is talking to you or you don't have conversation and your work is forgotten and then…that just shows what friends you have…excuse me, can I ask you a question please? There's a point system that goes with our games, right, so what like and we're in different groups and the group has to accumulate points

BP 4:T2- 4:11 [I think the main thing is beca..] (4:4) (Super)
Codes: [Benefits of gaming] [Engagement] [Reflection] [Structure-meaning]
No memos

I think the main thing is because at least you get to do the module once and you don't want to repeat it next year…ja, definitely, the most important thing here is we want you guys to understand better, so that we can assist you to pass your module. That's why at times, even before a test, I mean she does emphasizes, there's emphasis on guys, please go and play games one, two and three, so that you are not surprised when you are writing the test….You see things that you don't know. We know that when we play games one two and three we are going to get material, some of the material is going to be there in the test, so that's why there is that emphasis, you understand.

BP 4:T2- 4:12 [Now guys, this culture thing, ..] (4:4) (Super)
Codes: [structure- social background]
No memos

Now guys, this culture thing, does it matter? And not in a working environment, because…the one difference I would say is that being forced into a group with different cultures, that's when you engage and you can get to know more, but there's no like animosity between different cultures. That's an ancient thing…ancient yes…so not now; not in this day and age

BP 4:T2- 4:13 [between Sport Science and the ..] (4:4) (Super)
Codes: [Benefits of gaming] [Structure-meaning]
No memos

between Sport Science and the games? I don't bother reading the questions; I like just memorize the answers to get the multiple choice…ja, me too, I just see the first word…I mean in the MCQ's it's more summaries form of what we already have; this whole long answer thing…they can change some of it…that's so true…some of it that I…that's an interesting word summarize

BP 4:T2- 4:14 [Yes and no; yes, because I kne..] (4:4) (Super)
Codes: [Benefits of gaming] [Engagement] [Structure-meaning]
No memos

Yes and no; yes, because I knew the answer, but no, because I knew the answer because I've seen it before. Ok. So it doesn't allow you to have a deeper understanding? You're cramming, so to speak? Yes, it's cramming, is it personal or is it…….? Ok. Did this games allow for better understanding of course content? Yes, course content, yes. Same answers, same procedure as last year…memorizing and not really learning;……Ok, so you are saying this games promote cramming and parrot fashion learning so to speak? Oh no……the way he knows the answer…Ok, you know that it is B but you don't understand what B is? It's like……it would be better if we do an oral exam on it, because you won't see the answer when you have to say it…reading the book, then you'll understand……Ok, ja, but reading the question is about the game…Ok, but would you have had the same understanding of the content if you had normal lectures…so normal lectures, are they better than games? Ja, learning and then the games re-affirms…But can I just say something? Whether the course would have a game or not, we would have still studied for the test and would probably have just put in more effort if there wasn't a game, because you would still want to get the multiple choice answers, so you understand what I'm saying? So the games help you and it makes it easier, but I don't think it would have affected our marks per se…and I don't feel lectures are very important because her reading the slide to me and me reading the slide myself comes to the same thing. The only thing is when you're doing it in a lecture that if I have a question I can ask, but basically, it's a module I feel that I can do on our own

BP 4:T2- 4:15 [you guys have also worked with..] (4:4) (Super)

Codes: [Problems with wiki asssignement]
No memos

you guys have also worked with Wikki's and blogs ne?….I don't like that sorry…bad idea…you don't like Wikki's and blogs?….I pressed the button there and it disappeared…I don't want to do it again; ok…just…I don't know what happened. When I did it again, then it appeared only. So I don't know; it happened twice, so I don't know why…and also with the Wikki assignment, it's not…like people can just come and interfere with your work and there's two things I don't trust; I don't trust technology and I don't trust people and that was combined, which means anything could have happened to your work. Ja, and it did happen to a few people…like they kept changing the pictures of some people…yes…where they should make it if I log in, I can only check, but I can still see everyone else's, but I can't change it…ja, and it was due? you could change it yourself….how you do it and then on the last minute you see someone changed your stuff and that's…Ok…and you don't know who changed your stuff…you can't see who changed your stuff?

BP 4:T2- 4:16 [ja, but also I just, I didn't ..] (4:4) (Super)
Codes: [Problems with wiki asssignement]
No memos

ja, but also I just, I didn't understand like remember when we had an extension on that assignment, right, because there were people like they said they were copying and pasting from Word and bla bla bla…but I don't understand how that works, because if it was in Word it is still your own work…ok…that you just copy, so there's a lot of confusion and I don't think it was a good idea, but maybe if it was just tweeked a bit it could be a good…it would be a good thing ne or a good approach there? Because I think all of us, we worked on Word, well, those of us who worked on Word was just so…that because if you put it straight onto Wikki and you're not yet finished then people are going to comment and then you like ja, that is really dumb……..but it's not dumb to hand in work while…….. so we all did it like Wikki, Word, save it and saved it until we were done and then we all just transferred it and then she sent us that email, and then it was a mind if…I won't swear…I was like what are you talking about, what are you talking about? I think it's because of the……font size……We can't change font size, you can't change it, no, but I tried everything, because I didn't have time to…did you pass computers? Yes, I passed……line spacing……I didn't know that…Ok, so what was your first impression when doing the Wikki?……she says she did her Wikki the week before. Ja, I'll be honest. And what was your impression? At first I was excited, but then I……..but maybe you feel like Debbie Downer, not Ursula Upper?? Then they told us the format it should have been in and like what you needed to put in it like…I felt that very….I feel my lip swelling…laughter…what was your impression of the Wikki?

BP 4:T2- 4:17 [It was ok, I mean it was like ..] (4:4) (Super)
Codes: [Authentic Context] [Authentic Learning]
No memos

It was ok, I mean it was like really portable, like if you had a tab you could do it just there…ja, it was like we could do it anywhere……..but the fact that we didn't edit the stuff….that wasn't kwaai, but ja…….not much….did you wait long to start the Wikki? Did I wait long? Ja, I did… Why? Because I like doing things when I'm under pressure. I can't work just like that. I need to…..Did I wait? I did. You know what, I feel that if it was an assignment that I had to type out and print out and stuff, I probably would not have taken so long because I like to get stuff done and then actually I don't, I'm a procrastinator, but anyway, regardless of what format, I would have taken long to finish it, because that is just how I work. Ok. And I wasn't excited about it; I didn't feel the umph in me to do it. Yoh, that was a very emotional answer. Laughter…It's like I feel like I'm on Oprah?? Do you think that you'll be able to apply this work in a real life situation? Absolutely not……ok, that's it…so I mean that stuff that you learn on the Wikki; all that stuff…it depends on who you are; personally it didn't help me, because ja, no offence, I think we're just so accustomed to doing our assignments, printing it out and handing it in. Maybe if the next generation had to come and do it from first year they'd find it really cool. Ok, but then what did you enjoy least about the Wikki assignment? Everything…Ok, but do you think doing the Wikki helped you learn more about Sport Psych? Wait, can I just say there was one downfall to this whole thing. It said there that you had to mention, because you had to do like a small little introduction on the person right? And then you had to say whether they used any like mechanisms and stuff to help them, psychological tools to help them, and then it says you had to answer whether or not they did and if they did what did they use, but if they didn't use anything, then you couldn't complete the rest of the assignment. Do you understand? I doubt…like there wasn't enough professionals in our class to make just a deduction…ja, when we interviewed…….I just did…..playing a soccer match…my answer was very limited…I get there just before the game and I start playing…ja, you need to be on the field…ja, ok…not all of you……was it any of your experiences? And I just……..and those four pages, that was way too much….ok, it was a lot…talk about his warm up……when do we get our marks for that assignment? I think sometime this week; maybe I think…because it went in with the last lecture. A

APPENDIX I

Phase 1

All current quotations (77). Quotation-Filter: All

HU: Qualitative Data Analysis v1
File: [C:\Users\Simone\OneDrive\Documents\PhD\Qualitative Data Analysis v1.hpr7]
Edited by: Super
Date/Time: 2015-05-24 22:15:46

AP 1:T2- 1:1 [I decided to sit at the back i..] (19:19) (Super)
Codes: [Structure-sit in class]
No memos

I decided to sit at the back in the corner because there is a plug for my laptop so I could go onto FB or something so if the class wasn't interesting I could do other stuff like download stuff and stuff without being caught and stuff.

AP 1:T2- 1:2 [usually when we early we just s..] (26:26) (Super)
Codes: [Structure-sit in class]
No memos

Usually when we early we just stick to where there is an empty seat. Depends on what time I come

AP 1:T2- 1:3 [no it doesn't make a different..] (29:29) (Super)
Codes: [Structure- social background]
No memos

No it doesn't make a different. It doesn't make a difference. Usually actually it's not about being in the social background, it's about who you can interact, who you can learn from and always don't really go sit next to Vuyo or Wendy because we're friends no, just anybody that I can learn from.

AP 1:T2- 1:4 [I think we just go inside a cl..] (31:31) (Super)
Codes: [Structure-sit in class]
No memos

I think we just go inside a classroom and we see someone we know and we just go sit by them.

AP 1:T2- 1:5 [It was purely based on seeing .] (34:34) (Super)
Codes: [Structure-sit in class]
No memos

It was purely based on seeing someone you know

AP 1:T2- 1:6 [I went to sit next to someone, t..] (35:35) (Super)
Codes: [Structure-sit in class]
No memos

I went to sit next to someone, to people who, we can be friends,. Like people who looked like we into the same thing. Like people who looked like they are willing to learn

AP 1:T2- 1:7 [Ya, I think like ya. It intrig..] (38:38) (Super)
Codes: [21st century digital skills] [Enjoyment and Intrigue]
No memos

Ya, I think like ya. It intrigued me Like many of the students don't like know how the computers is working. Like so we learn like skills in the process in future like how to use a computer, how to use internet and stuff like that

AP 1:T2- 1:8 [t helped me a lot because I am..] (40:40) (Super)
Codes: [Communication] [Prolonged engagement] [Reflection] [Resources]
No memos

To helped me a lot because I am one that balanced studies. So seeing it the question is on the game going through it over and over. So even the mcq's helped me in the long questions, and it's easier for me to write to the test when I am having fun because I can think back . Even if having a conversation with a friend and she explains something to me, I would be like ok she said that and I write it down. So it made it easier with this game

AP 1:T2- 1:9 [I enjoyed playing the game bec..] (42:42) (Super)
Codes: [Enjoyment and Intrigue] [Signification- meaning]
No memos

I enjoyed playing the game because of my very short attention span so it kept my attention

AP 1:T2- 1:10 [I think the games idea is a co...] (44:44) (Super)
Codes: [Benefits of gaming] [Enjoyment and Intrigue] [Playing in groups]
No memos

I think the games idea is a cool idea I just think it's very difficult to balance keeping it interesting and losing the class. Because, this is a personal view. Like I would rather have an interactive group than sit and everyone is on their laptops doing their own thing in little groups of three. And you notice after a while, the teacher has no control over the class like things just start to get hectic and for a Friday first period [haha] it's a tough uh call to come to class when you don't really learn anything because you can't learn anything if you don't have everyone's attention. But it has its positives, it's a nice way to learn, but I don't think it can be done for every class and for like three weeks in a row

AP 1:T2- 1:11 [ya, I agree with her. It's lik..] (45:45) (Super)
Codes: [Structure- game- to be improved] [Technical problems]
No memos

ya, I agree with her. It's like a clever way to learn and stuff but it should be more structured because everyone is on their laptop doing their own thing. And I can't really give you an example of how she could have done it differently. But also, the connection is sometimes slow and unreliable and you can't click on the answer sometimes.

AP 1:T2- 1:12 [I think there should be more s...] (49:49) (Super)
Codes: [Playing in groups] [Structure- game- to be improved]
No memos

I think there should be more structure with like different team members having different responsibilities. Like sometimes everyone just like sat there quietly and everyone was reading the question. Instead of like one person reading out the question and three others saying like a., b c,. I think that we didn't communicate because we just sat there quietly doing it by themselves

AP 1:T2- 1:13 [at times the class can be a dr..] (54:54) (Super)
Codes: [Benefits of gaming] [Structure- ideas about time (class time)]
No memos

At times the class can be a drag because there is a lot of information for a short period of time. So by the time she gets to the 5th slide we switched off and it's a Friday obviously so no one is like…we are there in class, but no one is listening, like no information is like being grasped or I guess when you have the game it like wakes us up a bit. Although it's not constructive at times, at least we are focusing on something else.

AP 1:T2- 1:14 [it's because it's Friday. Because..] (57:57) (Super)
Codes: [Structure- ideas about time (class time)]
No memos

It's because it's Friday. Because if it was Monday we wouldn't have played games all the time

AP 1:T2- 1:15 [I could think of a few more mod..] (59:59) (Super)
Codes: [Suggestion for other modules]
No memos

I could think of a few more modules that could incorporate games

AP 1:T2- 1:16 [You say to us, ok ouens, we go..] (67:67) (Super)
Codes: [Technical problems]
No memos

You say to us, ok ouens, we gonna do this thingy so if you weren't listening and you will get a grand. So we go go go, but the game doesn't actually work. Like when you click on it and only one option goes. Like it's not her fault, but like when you plan an hour of your programme to this game and it bombs out in the first five minutes it fails. Now you have 60 students on campus on a Friday very upset.

AP 1:T2- 1:17 [like when you click: once t..] (68:68) (Super)
Codes: [Technical problems]
No memos

Like when you click: once the first question bombs out you are not going to try again. You lose interest.

AP 1:T2- 1:18 [I thought it was quite clever,..] (71:71) (Super)
Codes: [Novelty and innovative idea]
No memos

I thought it was quite clever,. Whoever came up with the idea was actually quite together with a different approach to teaching. And like 90 percent of the lectures are slides and lecturers talking, students not listening. So I think it was quite clever

AP 1:T2- 1:19 [I think it was a good way actu..] (73:73) (Super)
Codes: [Benefits of gaming] [Novelty and innovative idea]
No memos

I think it was a good way actually because it helped leaning. Maybe not in a big group like a classroom, but when you are home, studying for sure

AP 1:T2- 1:20 [like it takes less time because...] (74:74) (Super)
Codes: [Benefits of gaming] [Enjoyment and Intrigue] [Novelty and innovative idea] [Structure- time]
No memos

like it takes less time because you can be for that short period of time you can be more productive, like instead of taking hours and you get under aroused and get bored with your books. Then the game is actually a good idea

AP 1:T2- 1:21 [and it hypes you up as well. L..] (75:75) (Super)
Codes: [Benefits of gaming] [Enjoyment and Intrigue]
No memos

And it hypes you up as well. Like when you get the right answer you are like ýes'

AP 1:T2- 1:22 [I was like happy when we first..] (78:78) (Super)
Codes: [Enjoyment and Intrigue]
No memos

I was like happy when we first played the game I was like, yor, no more writing.

AP 1:T2- 1:23 [I thought like it was going to..] (84:84) (Super)
Codes: [Benefits of gaming] [Structure- previous ideas]
No memos

I thought like it was going to be like the last time because we got her for principles of management and I thought it was going to be like that because she just gave us charts the whole time so I thought it was going to be like that, and we must lam in a group again. It was boring man because every day 6 people and I are not even interested in this. Then I just lam there and they do all the work but then must present. SO I think the game was better. You don't have to like talk in front of a class and look stupid if you don't know what s going on

AP 1:T2- 1:24 [I think the game is just a goo..] (85:85) (Super)
Codes: [Benefits of gaming] [Novelty and innovative idea] [Structure- previous ideas]
No memos

I think the game is just a good idea to take a break from the rest of the week coz we've sit down listen write, slide slide slide. So I think that the game being introduced before we even knew it was going to be it was like ooooho yeah cool we could just just relax and I'd day doing work while not doing work.

AP 2:T2- 2:1 [Sit down, listen, write, slide..] (1:1) (Super)
Codes: [Benefits of gaming] [Enjoyment and Intrigue] [Structure- previous ideas]
No memos

Sit down, listen, write, slide, slide, slide, so I think it's the game being introduced even before we knew it's going to be it's just like ah cool, you can relax a bit and actually enjoy I'd say the work

AP 2:T2- 2:2 [We would recommend it for next..] (1:1) (Super)
Codes: [Recommendation for future use] [Reflection]
No memos

We would recommend it for next year's students…I think it's a fair idea… if they can do it again and everybody maybe… or at least make it that each person at least has to answer one…or something

AP 2:T2- 2:3 [I think it's like just a good ..] (1:1) (Super)
Codes: [Benefits of gaming]
No memos

I think it's like just a good tool to study with; you can use it before exams

AP 2:T2- 2:4 [Like before you study, first p..] (1:1) (Super)
Codes: [Benefits of gaming]
No memos

Like before you study, first play the games you know to see how much you know, then you go to your book after you study, you go back to the game, before the test you just play the game all the time, all the time…at the time of the test you're like, ok I'm ready

AP 2:T2- 2:5 [I think now that she introduce..] (1:1) (Super)
Codes: [Benefits of gaming] [Reflection] [Signification- meaning]
No memos

I think now that she introduced the games which is the mcq's, I think most people felt a bit more confident in their studies because they knew that , ok, I'm ok if I get all my mcq's, it's 50% of the test then it's fine, whereas if you would have studied long questions without the game, you like drag…I don't know what we would do whereas If you have the mcq's …like for me for example, I did my studies like play the game, I knew ok that's fifty percent of my paper, then I wouldn't neglect the long questions, but it just takes the pressure off you because you know they've got this, it's fine, whereas if you have long questions it would put pressure on you.

AP 2:T2- 2:6 [She should make a long questio..] (1:1) (Super)
Codes: [Structure- game- to be improved]
No memos

She should make a long question game actually… Ja…How would you guys like a long question game? Give me an example. She puts a question on it and then she puts like you know was it for her we did that assignment that we had to upload…she puts the thing like that…that box and then she just puts questions

AP 2:T2- 2:7 [like I believe that if you can..] (1:1) (Super)
Codes: [Communication] [Legitimation] [Sanction]
No memos

like I believe that if you can explain something to someone you can answer anything about it… the best way to like know you've got something…if someone does not know what you're talking about…then you like listen here, this is how it works… would you understand me… then you can answer the mcq's… and also I think it would be more interactive if you did long questions because then everyone can give their opinion instead of the mcq's being something which is chilled? and the others…ja I simply would agree you know, but like you said early morning and you have to tackle these long questions… but if it was a case that everyone could contribute… like how would you structure that because…groups of two or three…well, you brainstorm…is it the whole class you're talking about or half of the class, BSC's, BA's or…no they can keep the groups, like have five people in a group so that should be enough, but if it were mcq's then smaller groups would be better…I think she ideally wants everyone to be heard out of and then there must be a way to meet but five times… ok…there must be and then you can always … UWC…twenty in our class…no twenty…and then you just connect them and everyone can work

AP 2:T2- 2:8 [It's interactive like you get ..] (1:1) (Super)
Codes: [Playing in groups]
No memos

It's interactive like you get to share and you get the ideas from different people, because people think in a different way, so if I'm gonna think, when I do

AP 2:T2- 2:9 [k, I think it's cool like work..] (1:1) (Super)
Codes: [Benefits of gaming] [Playing in groups]
No memos

k, I think it's cool like working in groups because you're talking to people and you're interacting, but then again I also think it's not cool because some people they don't contribute and others… like today in class we did the group thing and then as soon as she said ok everyone go to their groups people were leaving the class so we eventually sat like with two people in our group so then that's not cool. There was a situation that some of the BSC's were writing… ja but…or was it some people they were literally in your group…Ja but…we had to choose our own group because I was with four girls that I didn't even speak to or whatever, but I know that it is like trying to bring us together and get to know one another, but like I felt like girl power?

AP 2:T2- 2:10 [I think it's actually better i..] (1:1) (Super)
Codes: [Playing in groups] [Structure- social background]
No memos

I think it's actually better if you get randomly selected, because if you are going to get into a click and what are the chances that you are going to talk about work, you know what I mean, because you have something in common with all your friends like you're not going to really speak about work, that's what I think, cause like the work gets second priority at times. But you don't have to speak about the work, even though you work with people…when you think of it…whether you're sitting with your friends or whether you're sitting with…ja, but you've got nothing in common with them…the chances are you're going to speak about work…no but it's the same thing…you're still

going to have people in your group that you… I have friends that's in my group … I know who are the people that will work and who are the people who will just sit… ja you know… but the thing is…we had people from third years with us that we don't even know their names and like we still don't know their names…laughter… I had a good group with just BSC's…last week they weren't there, I was the only one…What were you going to say? Sorry, I think I lost it when I was listening to you

AP 2:T2- 2:11 [I just think yes, because you'..] (1:1) (Super)
Codes: [Playing in groups]
No memos

I just think yes, because you're interacting with other people and you're interacting within groups

AP 2:T2- 2:12 [I think it started off…where e..] (1:1) (Super)
Codes: [Playing in groups]
No memos

I think it started off…where everyone reached the stage with everyone generally on the same page, all doing the same thing and it just became like normal like you've been hanging out with them and everyone else… I think in the beginning also we were all like assigned to a group and you would think ok, I know who this one is, I know who that one is… we would sit together, but then I think as the weeks went along people would just be like ok she's not going to notice, I'll just go and sit with my friends … so eventually people just like they made their own groups.

AP 2:T2- 2:13 [Why didn't she… cause its mor..] (1:1) (Super)
Codes: [Playing in groups] [Reflection] [Structure-sit in class]
No memos

Why didn't she… cause it's more structured…cause it's the games ……..we're not in high school anymore… but if you let people get away with that they like look at you … the advantage of…like Ms Titus is… she's a great lecturer…like if you fail your subject … she's amazing… you just get those lecturers that you just can't fail their subject because they know what they're doing – like it's hard to gain so much and incorporate discipline… it's like civvies day in primary school… no-one is…in civvies day when it's primary school…but the minute they're in their uniform they like ja, for me, this is how we do it… so you bring in a game…we don't deviate at university, so you don't conform, that's in a class… but if we do a lecture, this is what we do at university…this is how we sit with students and we

AP 2:T2- 2:14 [You ouens from Management, I d..] (1:1) (Super)
Codes: [Communication] [Signification- meaning]
No memos

You ouens from Management, I don't know how you passed Sport Psychology, because we've been doing like Psychology for like two years and we still get lost along the path. It's very difficult to explain something that is so like it doesn't have a science to someone who works on theories and this is how it is and models and stuff so if you…like everything we speak about is Sport Psychology

AP 2:T2- 2:15 [Not really no…I don't think it..] (1:1) (Super)
Codes: [Structure- social background]
No memos

Not really no…I don't think it was really about the cultures it was like just finishing the game and leaving. Understand? We didn't like ask look here…if we doing a game you don't have time like to socialise…that's true – you have like about ten second

AP 2:T2- 2:16 [Come and sit next to you… beca..] (1:1) (Super)
Codes: [Structure-sit in class]
No memos

Come and sit next to you… because he's black, but you just sit next to someone…this culture thing is being dragged…we're still going to be talking about how do you feel about culture when we're doing our PhD's. It's not important anymore… I can't deal with this conversation anymore…I just sit next to whoever happens to be there and whoever I want to talk to. But I don't look at your race or your religion; it doesn't matter anymore. And basically we just sit there to get done. It's a Friday morning and we just really want to get done and go home, so you don't still bother with people, you just want the right answer so you get a high score and you leave

AP 2:T2- 2:17 [a, that culture thing; it's ju..] (1:1) (Super)
Codes: [Structure- social background] [Structure-sit in class]
No memos

a, that culture thing; it's just like…it's almost like we are all part of the same culture…like the twenty first century culture. We all do the same thing…there's no culture thing anymore, so just scrap that…laughter…this culture thing is really over rated…and this race thing, all this questionnaires, like I just think… you don't exactly go around saying I won't sit here because I'm a shade darker than you…it's not going to make me understand better…because at the end of the day it doesn't matter if you're black or white, we all do the same thing, we're all on BB, we all do the same thing, we all hang out at the same clubs, so I mean it's not really about…Ok so if I can understand everyone is getting a bit confused about the difference between race and culture…well race is obviously the colour of your skin… then culture is about who you are, what you do…it really goes hand in hand with religion and heritage…background…maybe that question should be asked throughout the course that we're learning…difficult when you have half an hour…I think it's unnecessary and they should stop it because what is unnecessary and who should they stop? Who's they? Culture, I mean, if I'm meant to answer questions in a specific time frame, I don't have time to be saying because I feel that on this day it was raining and I did not feel like coming to class, no man, just do the work and get done, get it over with

AP 2:T2- 2:18 [t is, because obviously people..] (1:1) (Super)
Codes: [Benefits of gaming] [Signification- meaning]
No memos

t is, because obviously people learn better when they… the practical application always comes with something when we're taught, but I think it depends a lot on the structure you know what I mean, like there's games and then there's games

AP 2:T2- 2:19 [Yes…You see like when you're s..] (1:1) (Super)
Codes: [Benefits of gaming] [Playing in groups] [Recommendation for future use]
No memos

Yes…You see like when you're saying things… It's difficult…I think she should have made the groups maybe smaller…like five…was that at first or…we were like first…on that list maybe we could still… on the projector maybe and then our lecturer read it and then the group can discuss it and say one answer, something like that. Like I think at first she said that it was going to be a thirty seconds game; I think that's what she said. So what I

pictured in my mind was like everyone is now in their groups; you have like a team whatever, then it goes on the projector and then the team that has the answer says the answer, that's more interactive for the whole class with everyone working together and that I think everyone will be interactive with each other…that is just beyond it.. like thirty seconds in a class of about ninety people, people are shouting answers that… like this game, but it can be more controlled but the thirty seconds is a good idea but that's just… So what if you were the one who came… controlled…like you say there can be more control so obviously in your mind you think you can control…it can be more controlled, but I thought that as it was, it was like that…the whole full process… so we're going…Matthew Kenneth... I think just one person in the group can have the responsibility of saying the answer, instead of everyone doing it… with regards to the whole interactive thing on the projector or what? If it's is on the projector, if it was twenty seconds then you can just have one person…like in relation to what Dillon said like on the projector like the whole class interaction…the one method that I'm thinking of now…like if one group raise their hands to answer… maybe they're out for the round so they will sit out for the round… they're not allowed to answer again so…it's gotta be like you know what I'm saying…there's going to be like discipline in the group; like everyone is going to participate then you can see who are the weaker ones and who are the stronger ones

AP 2:T2- 2:20 [I don't really think any game ..] (1:1) (Super)
Codes: [Playing in groups] [Reflection] [Resources] [Signification- meaning]
No memos

I don't really think any game can be controlled if you think about it. I think we had the same thing in our Sports Management tut where we had our tutor that played similar… where she had a game and she had questions and we would sit with our laptops and answer…that was chaotic as well. So I think even though the game or just the class in general is disruptive, we have only a short amount of time where we can actually focus, so whether it's a class or it's a game …it's going to be chaos…I don't want to speak on behalf of everyone, but I know

AP 2:T2- 2:21 [I think the game is a valuable..] (1:1) (Super)
Codes: [21st century digital skills] [Benefits of gaming] [Communication] [Enjoyment and Intrigue] [Legitimation] [Sanction] [Signification- meaning]
No memos

I think the game is a valuable tool as we all learn from it and like…says it can't be controlled but I mean everyone enjoys it. They find the game just to take time just to relax and stuff and we can still learn from it so ja, on Friday you don't want to come in and do work…you just want to chill until the time that you can go home, just get away where everyone actually just wants to just do the game, learn a bit and then go home, whether it's controlled or not, because… you can split the two

AP 2:T2- 2:22 [I think it's up to whoever as ..] (1:1) (Super)
Codes: [Agency] [Benefits of gaming] [Legitimation] [Reflection] [Signification- meaning]
No memos

I think it's up to whoever as individual to take their own responsibility and take it for themselves to make it if they want to learn from the class… I think from in a class perspective it does not really help so much for me personally like if I had to go and write a test now and answer it I'd probably get one or two right, so I think if you take it home and you do it at home before a test or exam, that should do it

AP 2:T2- 2:23 [like after I've worked with pe..] (1:1) (Super)
Codes: [Benefits of gaming] [Communication] [Enjoyment and Intrigue] [Playing in groups] [Recommendation for future use] [Signification- meaning] [Structure- game- to be improved]
No memos

like after I've worked with people my whole life and best way to learn…people is to give them a reason to do something. So the game needs to be like a short amount of time and at least to show that it is useful. Our conversation to date it's like it's not useful…so for instance if you have to have Sport Psych on Friday during second period ok, then what you do is to say next week we're writing a test first ok, so you're going to come in at quarter past nine in Gym B and you are going to play at ten, the game for fifteen minutes, pack up at half past, twenty to we start the test, then the game seems to be more controlled. Everyone has taken in the information, because now there's a

AP 2:T2- 2:24 [you have to go home and study ..] (1:1) (Super)
Codes: [Agency] [Benefits of gaming] [Communication] [Enjoyment and Intrigue] [Playing in groups] [Resources] [Sanction] [Signification- meaning]
No memos

you have to go home and study and you have to come prepared so it forces you to study and then still in a team environment because you have to work out what the team… to get the marks, so it's best of both; you have to study…maybe you can do… give us the information, take it home, read through it…and then in the tuts, ok the tuts are after the class…but then maybe just in the tut play the games.

AP 2:T2- 2:25 [if… don't come to class, becau..] (1:1) (Super)
Codes: [Communication] [Legitimation] [Playing in groups] [Sanction]
No memos

if… don't come to class, because…And I think even though there may be a lot of chaos obviously, like people would be loud and stuff, but then she can implement rules like if you speak out of turn then you're disqualified, that will also like bring discipline into it and it would be more exciting also for the class to want to learn and you know

AP 2:T2- 2:26 [I don't think it's about Sport..] (1:1) (Super)
Codes: [Benefits of gaming] [Communication] [Enjoyment and Intrigue] [Playing in groups] [Signification- meaning]
No memos

I don't think it's about Sport Psychology…the game… which I think it's cool. Obviously it does allow for interaction because it's a group assignment. It's a group thing. The game possibly can get people together as well, cause I mean once you start getting answers out you're more confident and you like… I think it's a good thing like they say two heads are better than one so right if I answer question A and the other one gets question B we come up with the answer

AP 2:T2- 2:27 [so when you play the game and ..] (1:1) (Super)
Codes: [Benefits of gaming] [Communication] [Legitimation] [Playing in groups] [Sanction] [Structure- social background] [Structure-sit in class]
No memos

so when you play the game and you're with your friends, how does that work? Better, because you know your friends and it's easy to interact with them like we have a BSc… she stands there and she's like ok, this is the answer, this is the answer when it comes to the wrong answer and you like really…., whereas if it's your friend then you like but it would be this because of this and that reason and I think it's easier to interact with your friends because you can reason together and you can understand why you make certain decisions…You might give an

answer and you might be wrong…you don't care if it's wrong at the moment because your friends are not going to laugh at you. If I was like with BSc's, then you won't want to answer, so I think with your friends it's better. You know them and like you don't care what their opinion is about you it's like you don't care man and you'll think nothing about it, you won't get violent about it, whereas with BSc you must still be accepted outside like that … laughter. With your friends every body just shouts at random…whereas if you're with people that you don't know you would rather not say anything than say something… and also BSc's tend to be smarter than BA's so if I was in the BSc group, I wouldn't like answer, even though I know the answer, because I won't dare to answer… so I'll just sit there and they can answer their stuff… Ja, obviously, they tend to know everything.

AP 2:T2- 2:28 [the one was like sitting with ..] (1:1) (Super)
Codes: [Communication] [Domination] [Legitimation] [Playing in groups] [Sanction] [Signification- meaning]
No memos

the one was like sitting with her laptop in front of me making as if she was listening, going through her notes, MBS notes, you see what I'm saying, so it makes you feel we don't do that kind of stuff… but not the stuff they do, so I will feel inferior when they give the answer, I will just sit there and like ok fine … Ja, that's why I'm saying…the difference between us…like socialise with your friends… teamwork, like you said earlier…it's more productive to do it… if I was productive, like if it was my game, I would try not to…just from a… point of view. Yes, but sometimes your friends like motivate you, you understand what I'm saying, you boost each other, whereas if you don't know people it's like ok what do you say? Whereas if you know people it's like ok, we're working towards something and if we get the prize we can celebrate together.

AP 2:T2- 2:29 [Now the other group they get t..] (1:1) (Super)
Codes: [Agency] [Communication] [Domination] [Enjoyment and Intrigue] [Legitimation] [Playing in groups] [Sanction]
No memos

Now the other group they get the prize, then you think, ok, everyone has their own prize. I think even if you're with your friends or you're…. the time period in which to do it so obviously then you check like yoh…ten seconds out of a minute that you're going to do it…let's do this and then we can talk about other things that everyone hated. But I think the whole objective of…. is to get you out of your comfort zone and to force you to socialise. Not socialise, but to engage with other people that you don't normally engage with because if you're not invited you won't just go to BSc and visit and have a conversation…so that's where it starts in class, and then it spreads outside your circle of friends…I think that if you're playing the game with your friends the game as just the game it's fine with your normal group of friends, but I think if you're playing it as a game and doing something with your friends you would know that ok, this is the one that works and this is the one that doesn't, so you tend to, if it's working towards something, like for example me and Ashley work well together, I know she studies hard, I'll tend to be in good action, because I know how she is a hard worker, whereas if we're playing it as a game just for the fun of it I would say it's fine

AP 2:T2- 2:30 [So if I'm going to be working ..] (1:1) (Super)
Codes: [Agency] [Playing in groups] [Resources]
No memos

So if I'm going to be working towards something that's going to help me, I would tend to work with people that's going to get me there so ja

AP 2:T2- 2:31 [Ok. And also the other thing i..] (1:1) (Super)
Codes: [Agency] [Communication] [Domination] [Legitimation] [Playing in groups] [Sanction] [Signification- meaning]
No memos

Ok. And also the other thing is that it's better working with friends, because like they're saying it's better to work with other people, because you learn and whatever and you're disciplined, but with your friends you can also be disciplined, because it's all about the way you learning, do you understand what I'm saying? It's all about learning this certain thing, so if you work with someone that you don't know, then it's like you're just sitting there, you're not going to learn, so the best way you're going to learn is like with your friends. I just think it's cool to have people in different groups, but don't mix BA & BSc, we don't mind to travel…laughter…don't add insult to injury… like it's ok like you can sit with… sit with BA, ja because we are going everywhere together like a family, but not BSc, because that's just looking for trouble. Put the BSc's with the BSc's, they come with their jargon, we come with our jargon… I think you should not force it like if they're saying we should work with different people and whatever but you should not force it, if you don't feel comfortable within a certain group you're not going to learn… so what if you have like some…dude that's from BSc…BA… you can sit with any BA in law in full time group basically, but I think it's more a subject of being with BSc's because they just think they are… but you can't really spin a class, I mean like BA sit here and BSC sit here… if BSc is with you going to think I'm so cool… that's why… laughter…so with regards to getting back to the point… whether you work better with your friends or not…I think it comes down to individuals like the dynamic of your friendships, you are like tight with your friends…we're all going to talk about the soccer together if you're good friends like being productive together…ja, but I mean like my friend… laughter… that's why I personally prefer to be with people, you know what I mean… but that would be your experience at university…unfortunately

AP 2:T2- 2:32 [across cultural barriers? Not…..] (1:1) (Super)
Codes: [Benefits of gaming] [Communication] [Domination] [Playing in groups] [Sanction] [Signification- meaning] [Structure- social background]
No memos

across cultural barriers? Not…Yes… but if you say yes then you must tell me exactly why…it can plant the seed … you can be forced to work with someone… for that … social age starts outside – it carries on outside of varsity…you guys can play beyond your need basis but outside… but inside you're in a group, but outside…which is like two different people while you're onto…but to something that he said now if you are forced to do something or be with someone that you don't feel comfortable working with, you're not going to want to work with him…so even in a working environment, if you're forced to work with someone, it's going to affect your work

AP 2:T2- 2:33 [if someone is going to force y..] (1:1) (Super)
Codes: [Structure- social background]
No memos

if someone is going to force you to learn about someone's culture…or put you in a group because you'll have to get to know someone, that's not going to work, you don't want to, you're not going to want to…but you must remember…whatever we learn…. Keim always says that Sport is used as a vehicle for peace…this is the same… Ja but we do, but I mean I think that we find that in just socialising, whereas if you speak to someone that's how it is…we don't…I won't say that we don't really care about going into people's background, but I can have this conversation about… and it's fine. I won't go to someone to ask, where are you from, where do you live…laughter… you don't want to be forced to work with people that you don't want to work with ……all this cultural differences whatever… if you've come to varsity and you haven't been with people from a different social class or from a different culture, there are something seriously wrong with you…….you're like almost twenty and you haven't been exposed, especially if they're sport students, you're about to meet people from different social backgrounds… I feel the same way.

AP 2:T2- 2:34 [It's also up to you to decide ..] (1:1) (Super)
Codes: [Communication] [Domination] [Legitimation] [Sanction] [Signification- meaning] [Structure- social background]
No memos

It's also up to you to decide what you're going to do like when you went to grade one, you probably did not know everyone and then you are kind of forced to make friends , otherwise you're going to chill all alone and by yourself… whereas now whether you're working with someone that you don't know, if you are forced to work with them it's up to you whether you get to them inside class or outside class or just in class to be a buddy to work, it all depends on how far you want to go with that person. Do you want me to add more to it? No. I was just going to say like I think that maybe working with different cultural backgrounds, if it's like very different on campus and some difficulties because maybe with regards to the work you would like want to work at certain times and they can't or you want to meet after work at places that they can't go to and things like that you understand. Language barrier is also a factor as well, because I am just talking from experience. I had a Psych group that I was randomly assigned to a girl who was from Worcester or something like that. I literally could not understand her accent because it was very different to the way I learnt English

AP 2:T2- 2:35 [but go to the primary schools ..] (1:1) (Super)
Codes: [Benefits of gaming] [Domination] [Enjoyment and Intrigue] [Legitimation] [Playing in groups] [Sanction] [Signification- meaning] [Structure- social background]
No memos

but go to the primary schools and let them play games and ask them … we all have our own perceptions, some of us may be still a little segregated… like all the people are set in their ways; not set in their ways but they have their own thoughts and that and like you don't want to push something, but they obviously they want to…because it is…so many wishes for like cultural integrations for the children like now as…this question is going to get more outdated every single year

AP 2:T2- 2:36 [You can see a lot of preparati..] (1:1) (Super)
Codes: [Communication] [Domination] [Signification- meaning] [Structure-sit in class]
No memos

You can see a lot of preparation and stuff went into her lectures…laughter…Like my highest mark at the moment is for Sport Psych out of all my subjects. Some lecturers give us tips on how to…like she incorporates the whole class…she doesn't just stand there and reads off the thing…she'll read something and explain whereas you get some lecturers where you sit for like the full hour…just explain the first slide and then we are so bored because we don't know even the whole word… , so she will speak on one thing, explain it and give examples. She'll ask you, ok guys, do you want to have input on the subject, do you disagree on it…will give her feedback. It's interactive…the thing is you can ask her something and she'll answer. She makes it easier for you to understand and then that to me if I ask for something or if someone else asks her something in class she'll explain and I'll think, oh Ms Titus said this or she said that.

AP 2:T2- 2:37 [So like maybe they should try ..] (1:1) (Super)
Codes: [Agency] [Benefits of gaming] [Communication] [Domination] [Enjoyment and Intrigue] [Suggestion for other modules]
No memos

So like maybe they should try and do it in other subjects and we'll do better…or like at least get your class more lively or something because now you go to lectures and we sit there and we like why am I here? You don't want to go back, they must give you reason to go back like I know they don't have to but come on.

AP 2:T2- 2:38 [o if you think a game in Kines..] (1:1) (Super)
Codes: [Suggestion for other modules]
No memos

o if you think a game in Kinesiology or Fitness class … would you say the games work in class…like games can work in most classes, but it just needs to be adapted for the subject… you can't go too far in complaining about the subject … no, I'm just saying games can work in different modules and subjects, but it has to be adapted to the work like the game this sport …won't work with Ex Phys? The concept might work with Fitness but it has to be adapted... and I think like in Ex Phys we did a thirty seconds game, even though we couldn't answer the question, the BSc students they answered the question, but like we're still talking about what they were saying

AP 7:T1- 7:1 [Look I think you'll always be ..] (19:19) (Super)
Codes: [Communication] [Legitimation] [Structure- social background] [Structure-sit in class]
No memos

Look I think you'll always be around and you'll always hang around people who not who you hang around with but who you are more at ease with and as the year moves on you will move on and introduce yourself to friends and meet new people, so my answer will be you sit with people you feel at ease and more at home

AP 7:T1- 7:2 [Because no one wants to be alo..] (25:25) (Super)
Codes: [Structure-sit in class]
No memos

Because no one wants to be alone

AP 7:T1- 7:3 [and you'd rather sit with frie..] (29:30) (Super)
Codes: [Structure-sit in class]
No memos

and you'd rather sit with friends and they will be like…ýeah you right' .

FB: Yes, acknowledgement and acceptance.

AP 7:T1- 7:4 [that's the negative but the po..] (42:44) (Super)
Codes: [Benefits of gaming]
No memos

That's the negative but the positive was, when it came to the test then we like knew because it was the same questions.

ALL: er

Student 5: then why didn't we just play the game again in the tut with Smart in groups.

AP 7:T1- 7:5 [What made it enjoyable though ..] (48:48) (Super)
Codes: [Benefits of gaming]

No memos

What made it enjoyable though was that the game was actually fun regardless of the class time and when

AP 7:T1- 7:6 [:It was fun. ok anything you ..] (49:49) (Super)
Codes: [Benefits of gaming] [Communication] [Legitimation] [Playing in groups] [Structure- social background]
No memos

:It was fun. Ok anything you do with the people you hang out with your friends is always fun. It's exciting. On your own it's like you know…you got 50 or less it's gonna be bad on yourself you gonna be hard on yourself and with your friends you can laugh and you can joke. And, there is always help. You aren't alone and help is always good, even in exam time.

AP 7:T1- 7:7 [with me I had people I didn't ..] (52:52) (Super)
Codes: [Benefits of gaming] [Domination] [Enjoyment and Intrigue] [Sanction] [Signification- meaning] [Structure- social background]
No memos

With me I had people I didn't know. It was like third years from last year and I didn't like know….most of them. So I didn't like know all of them. But it was…the fact that you think you gonna get…like anyone knows they're gonna progress. Like everyone knows if you play the game once you're not gonna lose the marks and the next time you play it's like you're doing better and everyone wants to do better and that's what made us want to play more. That's what made me play it

AP 7:T1- 7:8 [I think it was like new. No ot..] (57:59) (Super)
Codes: [Benefits of gaming] [Communication] [Enjoyment and Intrigue] [Novelty and innovative idea] [Signification- meaning]
No memos

I think it was like new. No other class do you like play games on the laptop. It was work based. It's a new concept. And I think it gives people more focused attention because people enjoy playing games as opposed to sitting in lectures listening to someone talk

FB: it was a bit interesting. It was new as he said. It isn't like you there, your hour and just talk talk and you just sit in your seat and we are all in our seat and just listen. We were all involved so it was good.

SB: Curiosity was a big one because you didn't know what to expect when you playing the game and you often you're curios.

AP 7:T1- 7:9 [it depends on the game. Becaus..] (63:63) (Super)
Codes: [Benefits of gaming] [Legitimation] [Signification- meaning]
No memos

It depends on the game. Because in games concepts where literally playing the game where you are playing a learning. But the way she did it was different because it was more theory based.

AP 7:T1- 7:10 [its very effective coz its ver..] (69:71) (Super)
Codes: [Agency] [Benefits of gaming] [Domination] [Enjoyment and Intrigue]
No memos

It's very effective coz it's very interactive

CDK: It tends to stick in your mind more

Student 7: ya, and some people take more note of the information that there's being brought across because they enjoy it with their friends as Faheem said

AP 7:T1- 7:11 [WL: so what was it like playin..] (96:97) (Super)
Codes: [Playing in groups]
No memos

WL: so what was it like playing in a completely di different group to what you are used to?

KH: uhm, it was different. I mean we all felt awkward. [laughter] Then we were like, ok, we have to finish the game and we all had one idea of what we needed to do

AP 7:T1- 7:12 [so what, you felt awkward, you..] (99:105) (Super)
Codes: [Benefits of gaming] [Domination] [Playing in groups] [Signification- meaning]
No memos

So what, you felt awkward, you felt….

KH: yar, but then we got more comfortable.

FB: ya

KH: because I mean you have to break that ice and someone has to say something, and at a stage you're really shy and you have to go over and you like, hi, and what's your name and then you start talking to me and feel comfortable. So I think when the first person spoke, broke the ice and then.

WL: what was one of the benefits of being in a different group?

KH: leaning new

CV: you wanted to work, because when you're with friends you tend to snap off a bit and just make fun and stuff all the time. But when you with other people, you actually want to work then you want to work like not hinder

AP 7:T1- 7:13 [ya, but as you said as well, i..] (111:111) (Super)
Codes: [Playing in groups] [Structure- social background]
No memos

ya, but as you said as well, if you hang out with your own friends you aren't going to be as hardworking and slack off because I know that he's going to do all the answers, he's going to do all the hard work but if you in a new group you will also want to, not be smart, but in their eyes you are going to look smart and going to put that extra effort in or the others are going to thing…don't be silly.

AP 7:T1- 7:14 [It's a good way to build other..] (120:120) (Super)
Codes: [Benefits of gaming] [Signification- meaning] [Structure- social background]
No memos

It's a good way to build other relationship besides a new friend. So you might meet someone you might have something in common with hat you could help you like later on and then you can go to that person by building that relationship during that class

AP 7:T1- 7:15 [I feel that in the sport science..] (127:131) (Super)
Codes: [Benefits of gaming] [Playing in groups] [Structure- social background]
No memos

I feel that in the sport science group everyone is a lot more interactive and accepting of each other. Where I came from the b.com faculty and as the white kid down there who…like people will exclude you especially from group projects and stuff. So the community over here is lot more accepting. So stuff like that doesn't really faze us

SB: I think the main reason why we are so accepting I because we have to interact because we do team sports and even if a team did individual sport like tennis you play against an opponent so we are always interactive and so we will always be more interacting.

WL: so you base it on the basis of the nature…

SB: the nature of our sport

CV: but that's how we are man, even without our faculty and before this we did sports and we came like the first, our first year and then at orientation we interacted a lot with each other, especially, and we made friends with each other. That's how we are, like, but I wouldn't know about the other faculties, like he said, like b.com side them, they like, you know…group assignments etc.

APPENDIX J

Reflective Blogposts (extracted from Blogger)

*All names have been removed

58 comments: (1 was removed, i.e 57 usable comments)

1.

[redacted]September 18, 2014 at 12:20 PM

When I first heard that we had to write a blog on someone, I was very skeptical. I thought that I would never be able to do it because I lack interest in any forums of blogs and I have never actually written a blog before. Before I even started writing I had issues, such as not being able to log in and had no idea where I was meant to write the actual blog. Once those issues where solved I started to write the blog, I thought it was very frustrating and I struggled but once I got the hang of it I enjoyed it.

I am enjoying writing about someone's sporting career throughout their life and at the same time I am enjoying searching up on new materials to write about in my blog. I believe that this is a very creative way to learn and study our work. I did enjoy this assignment but it was a lot of work to get done but there was ample time to get the assignment done. To go into more detail what I liked about the assignment: I really enjoyed the research behind the blog and that we could integrate the work we have covered in class to a real life situation. Where you are discussing someone's talents and motivators while also covering his/her weaker sides and giving that particular person advice on how to improve his sporting ability.

I found this assignment to be challenging at times, especially the recommendation section. This is because there was a lot of work to do and a lot of research. Another challenge was the amount of work load but there was plenty of time to finish up the assignment. I spent a lot of time producing an assignment to the best of my abilities but I believe that I could have done better if I understood how the blogging 'system' worked from the beginning. Other than that I think that it was a straight forward assignment that made sense to do as BSc Sport Scientists doing Sport psychology.

I like the context of the assignment and I am sure many other people found it to be a rather fun assignment to do. The best way to describe it I guess is that it is a different way to do assignment and through me a curve ball in the beginning but I adjusted my mind set and wrote a blog about someone's sporting life.

Reply

2.

[redacted]September 21, 2014 at 6:25 AM

I found the task of designing a wiki and writing up my assignment quite rewarding. I have never made a wiki before so it is a new skill which has been very useful to learn. Initially I had some trouble in that the wiki deleted certain items when I posted it online, and so I had to redo certain pieces. I did eventually get the hang of it and liked seeing the whole wiki coming together in the end. There is quite a lot of creativity involved in designing a wiki. I'm sure that if I gave all the same material to someone else they would have set up the page very differently to how I did it.

I found myself 'in the zone' with this project. I could have kept writing as it was an assignment that really appealed to me. I love finding out what makes people tick, and why people enjoy certain types of sports over others. I learnt more about the person that I was writing about, and not only that, but also more about their particular sport. I found some valuable information that I will apply to my own sport as well. The range of information that one can access with regards to psychological tools used in sport is quite vast. I could definitely see myself choosing to become a sports psychologist because I am fascinated with the subject matter. The mind is extremely powerful, and despite one's physical skills and genetic disposition, success is largely determined by what you believe, your mental attitude and the decisions that you make on a daily basis.

I am not that enthusiastic about blogging because I prefer to speak to people face to face than through a computer. It does have its advantages however as some people that are perhaps too shy in public are able to express their opinion more readily on the internet. It also allows people to really think about what they have to say before they say it. This gives their writing more conviction as they have obviously really thought about what they wanted to say and made sure to say it as clearly as possible. On the other hand, the information is more censored for the same reason, and perhaps what someone might say in public in a heated debate may not come across quite as dramatically when they are on a blog as you are unable to read intonation in a person's voice or read their body language. I would think blogs would be useful if debates were being discussed or if decisions had to be made on a particular matter and there were very different opinions being discussed. But as far as general conversation goes, I do not find blogs appealing.

I think it is a good idea to have a site that is dedicated to a particular group of people, such as ourselves. I have learnt more about people in my class and have heard the opinions of people that don't often speak up in class.

Reply

3.

[redacted]September 22, 2014 at 7:02 AM

When starting the assignment i found it very interesting and spontaneous looking at other subjects that are all based on the same working styles. At first it was great researching someone and finding out new things about them and about there sport. As time continued i found blogging a bit difficult to manage. When looking at blogging or any university assignment we have to look at the privileges that people have. I could not work from home due to lack of internet access. The nearest internet cafe was a bit far beside the campus computers we have.

I started on the campus computer and when I was at the end of my assignment something happened that made 3 hours hard work disappear in a second. I tried to recover it but nothing happened. I was on the verge of giving up and not doing the assignment. We had a lecture on aggression in sport and that shows that within context of any situation a person can become really aggressive.

I had to skip class all day because i had to restart my assignment and campus computers were the only place I could complete it. Beside my work disappearing and lack of internet access, I think blogging is something that is going to be the best way to improve education and general knowledge because reading other peoples blogs helped improve writing and knowledge about different things they were writing on. It also helped comment on peoples work and giving them advice on how to improve.

Over all for my blogging experience i would say i'm 40% happy with it but i can see that moving up to a 70-80% if i had better internet access and more experience of blogging.

The one thing i learned is that saving your work as you progress is important, although saving your ruff work during blogging means that people can read on what you constantly working and i felt that raw material was not good enough to be read.

Reply

4.

[redacted] October 1, 2014 at 5:08 AM

The day I first heard about the Wiki tool and a blog I was rather excited about it because I have never done anything like it before and I have also always wanted to use a blog. My experience using the Wiki was a bit tricky at first because I was not quite sure how to use it. Eventually I got the hang of it and got working immediately. There were a few challenges that I had endured due to a lack of resources but the experience was not too bad considering a few difficulties I had encountered.

I have learnt a lot from using these electronic tools and can now say that I have acquired a new skill. The advice and comment s I received on the wiki was very constructive and helped me a great deal with the composition of my athlete profile. Input from others always makes a huge difference and in most cases is very beneficial.

Reading some of the athlete profiles had made me realise that we hardly know our fellow students and I saw this as a platform to get to know one another and learn others experiences. It is always interesting to read about the interests of others and their achievements. I learnt things about people that I communicate with every day and never knew how talented they really are. It was a very insightful experience and I am amazed by the talents my classmates bestow.

The challenges I experienced with the wiki was that I had problems with doing the task directly on the wiki tool due to a lack of internet connection therefore I first had to do the entire profile on Microsoft word and then copy it onto the wiki. After I was told that we are not allowed to do so I then had to edit my entire athlete profile on the Wiki which required a large amount of time and internet connection. I Spent a great amount of money at the internet café because I do not have any internet access at home. Due to these challenges my whole outlook and experience had changed regarding the use of these electronic tools because it turned out to be stressful and very costly. Despite the challenges I had experienced I would not say that it was a difficult task but I did not experience any fun aspect with the wiki but I did find it rather interesting. It is not something that I would like to do again.

I would recommend that students get permission to do the task on Microsoft word because not everyone has internet access unless we spend long hours on campus which is not always possible for most of us. I would also encourage all students to experience the use of a Wiki and a blog atleast once because it is a platform to communicate and learn new things about our classmates. It also broadens one's knowledge regarding the different topics which are being discussed in a blog.

Reply

5.

[redacted] October 7, 2014 at 5:45 AM

At first I did not find the wiki assignment very appealing, because I did not like the idea that anyone in my class could access, read and comment on my work online! But when I started to compile the project, I actually enjoyed it.

I have never created a Wiki before, so I found it very exciting, because it was an opportunity to enhance my knowledge and I like to learn new skills. I did not have any difficulties with using the Wiki website. I am quite competent with using the computer and the internet, because I had Information Technology as a subject at High School level. Although, it was quite a challenge to post a YouTube video on my Wiki page, but with the help of Google I managed to embed a video.

I learned a lot about Michaela Murdock and the sport she is passionate about. Before I started the project I didn't even know what Synchronised Ice Skating is. Michaela has Protea Colours in the sport and has competed internationally on multiple occasions! The assignment gave the class an opportunity to communicate and understand Sport Psychology from someone else's view. This project in particular helped me to understand the work that we covered, not only in Sport Psychology, but to apply my knowledge from other subjects as well. When the assignment was completed I found it very rewarding to read the comments on my project. It was interesting to receive feedback on the assignment and to get the perspectives from different students. This gave me the opportunity to improve my assignment.

I think that this assignment is a fun way to learn and I am sure that the rest of the class will agree with me. I would recommend it for future Sport Psychology students!

Reply

6.

[redacted] October 9, 2014 at 10:46 AM

This comment has been removed by the author.

Reply

7.

[redacted] October 9, 2014 at 10:54 AM

At first I was confused about the whole assignment, I originally thought that we had to write a sport bibliography on a classmate but when I learnt that it had to be a wiki page with all the added extras, I was slightly nervous and unsure id be able to do the assignment.

When I started my wiki and began to get into it, I started to enjoy it and found it educating and fun. Learning all the new skills such as; hyperlinks and adding a "click on" photo or video was a new experience and definitely a skill I will keep forever. My initial challenges was the method of hyperlinking and also what to and what not to reference. I also wasn't sure if I had enough or too much and the thought of the lecturer having to mark a whole classes wiki pages and coming to mine being too little or too much, was stressful. I put that thought out of mind and just did the best I could. Another thing I struggled with was the recommendations as I kept comparing mine to the assignment example, this threw me off a bit and confused me as I wasn't sure if we were meant to have psychical or psychological recommendations.

Researching and applying the knowledge I already had about the psychological aspects of sport was interesting and I tried to apply the methods I prescribed to Kyle, into my own sporting code and performances.

Kyle and I are alike in certain areas of our personalities and attitude's on and off the field so while doing this assignment, I felt I was learning about myself as well. Compiling and putting together a successful wiki page was a very rewarding feeling and I enjoyed it. I would have to say that if faced with another chance to create a wiki page on someone else, I would take the challenge, as its very educational and you learn a lot about someone and how to better their performance.

Overall the assignment was one of the better assignments I have done and like others have said, I too would recommend it for future students.

Reply

8.

[redacted] October 10, 2014 at 5:57 AM

Starting with the Wiki assignment was very daunting to me. I experienced frustration at first as I tried to log into the program on numerous occassions with no success. These problems were however quickly resolved after communicating with the responsible person. Some of my inner fears were unconsciously exposed and addressed because I felt intimidated at doing something completely out of my comfort zone. I had to secure two appointments with the athlete due to time constraints and distractions and eventually succeeded in collecting sufficient data for the assignment.

Typing the information for this assignment was not a problem but posting videos and hyper links were quite challenging to me as I am not that computer savvy. I was forced to seek for assistance from one of my fellow students which I greatly appreciated. It made me realize that one should be open and teachable to learn more about technology in order to broaden one's knowlegde as a university student. By utilizing the audiovisual aids, the content of the assignment were enhanced and thus made very attractive to the reader.

Just the thought of so many people having access to my assignment and commenting on it was very intimidating to me. My attitude soon changed when I received comments from peers who were actually contributing positively to my experience on the wiki even before I started working on it.I believe that critiquing is necessary in order to give someone an objective opinion of their work. It is also important to be as honest as possible when commenting and to remain unbiased. Being able to comment is one of the useful features of the wiki program that enables a writer to receive honest feedback - it could be positive or negative but should be constructive of nature.

When looking at blogging I enjoyed writing and was very excited about it as I always wanted to do blogging but did not know how to get started. I like giving my opinion and sharing insightful thoughts and ideas about different topics in life. As sports psychology is a very interesting subject to write about, I felt delighted at doing reseach about aggression in sport and sharing my personal views on it.I also appreciate reading about other bloggers' opinions, experiences and stories. I try not to judge them as we all differ in our outlook in life.

I know that I still have a long way to go in mastering technological skills in doing a wiki or blogging however I found this project very stimulating and educational. What I enjoyed the most was the liberty I had to write about an athlete and to share her story about her sporting career with my peers on the wiki program. As an aspiring sport psychologist I was able to 'analyse', 'advise' and 'guide' the athlete in her career as a sports person.Utilizing an educational tool such as the wiki and blogging programs, has given me an edge to step into greater and even more challenging projects awaiting me in future.

Reply

9.

[redacted] October 12, 2014 at 1:25 PM

creating a wiki for the first time was quite exciting and fun. I chose Frederick Muller as my student athlete, and doing research on him was very interesting. Everyone knew him as a great rugby player, but no one knew that he also excelled in cricket at a young age. Finding out all of he's achievements was great and kept me busy, i never knew about all of he's achievements in rugby and cricket until i did my wiki assignment. this just shows us that you don't really know your friends and your classmates. I enjoyed reading the wiki assignments of others to find out the various sport that our classmates take part in and all their achievements. I now have much more knowledge about my fellow classmates and which sport they are playing. Wiki was fairly new to all of us, but I think the part which most of us enjoyed was adding pictures and embedded videos. It is interesting to know how to make use of all these wiki tools as it makes your wiki look better and exciting. Another interesting tool used for the wiki was inserting hyperlinks, this was cool and could direct you to a page on the internet if you want to read more about what was mentioned in the hyperlink. For my personal experience with wiki, I would say that there were parts that was easy and enjoyable, and some parts that were not that easy. Being use to typing on microsoft word made me expect the same on wiki, but wiki was different in many ways. the difficult part of my wiki was getting all of the information about my student athlete which required long hours. Typing on wiki was also a bit tricky as it was my first time. I expected spell check and auto grammar correct as on microsoft word, but this was not the case. This had me reading through my wiki assignment each time before i logged

out just to make sure i don't have any spelling or grammar errors, and this was quite time consuming. I also struggled structuring my words as I wanted to put the sub headings in the middle of the page, but could not find a way to do so, so I had to leave all the sub headings on the margin of the page. I could gladly say that doing a wiki or creating a blog for the first time was a great experience and very interesting, I would highly recommend students to do this assignment every year as it gives you more knowledge about your classmates and at the same time teaches you some technological skills.

Reply

10.

[redacted] October 13, 2014 at 9:10 AM

Wiki, a word I would not like to hear to anytime soon, because with the word wiki came the great responsibility to deliver a breath-taking piece. Capturing the reader with a beautiful narrative coupled with some informative psychological recommendations. But considering the stress it gave me, I actually enjoyed using the right side of my brain.

My wiki experience was the equivalent of a monkey driving a car. It had a few similarities to Microsoft Word but there were a few challenging task in trying to keep the format of all the wording the same while attempting to change some of it. The biggest hassle was saving your work in certain format and returning to the wiki to see the format miraculously change somehow without any of your knowledge or input, but in the end I kept it safe by not trying to change much. Luckily before I posted any of my work of the wiki I heard a tragic story of how a friend lost all his work after a computer glitch and had to retype it. Immediately after hearing that I took no chances backing up all my work safely in a separate Microsoft Word document, as well as saving my work online every few minutes. I also helped a few classmates out of sticking situations, informing them if their original image was replaced by some unfamiliar image but an unknown user and how to correctly insert a video from YouTube in their Wiki.

Interviewing a fellow classmate was quiet an interesting experience, actually realising the thought process involved in setting up a questions that would get the optimum amount of information out of the student, I take my hat off to all journalists out there. The part of the wiki I enjoyed most, was the ability to view the assignment of others. It made it possible to see if you were on the right track, the areas you were lacking in and the pleasure of viewing some amazing stories about your classmates, things that would leave you astounded, which in turn enlightens you to perceive them in a different light and not to judge a book by its cover.

This assignment was my first online assignment and it was quiet the experience, as it was different from the norm. It makes learning a lot more fun and innovative as it creates a social writing platform that actually engages students. Even though it took a while to get into the rhythm of how operations work. The ability to insert a YouTube video into the assignment really fascinated me and blew me away.

I don’t really see myself as a blogger, as I am a man of few words really struggling to compile a 500 word reflection essay, but luckily the words came from somewhere. In my opinion the more people are exposed to these types of mediums the more comfortable they would feel in these spaces and would be able to express the work as they envisioned it to be.

Reply

11.

[redacted] October 16, 2014 at 3:09 AM

Yho! My first impression of doing the Wiki assignment was, why do I have to do it electronically!? Why can't I just type it and hand it in... Haha nonetheless I found the wiki assignment very interesting, I chose Sebenza Maphumulo as my athlete. It is quit interesting that I have been in the same faculty as this gentlemen but had no idea of his achievements. Same goes to the rest of my faculty mates, I believe majority of us were unaware of the greatness that lies in the individuals we see everyday. Like I said, at first I took it for granted, but overall was worth the experience and time should I add. It made me view my peers in a different perspective, not to take anyone at face value. The wiki assignment was rather personal though, I mean, its not everyone whose willing to give certain information away, I mean take for example Cohen Julius, for him to share some of his training techniques was rather a risk. My reason for saying this is, whether we like it or not, we are competing against each other, be it in the sports field or future work offices. But I must say, I did enjoy it. Though I got upset when we were given an extension because someone was lazy and just copied and pasted peoples work, for me that was very upsetting. It shows lack of respect for your peers work and the fact that we had to make the assignment much longer, made the situation even far worse. We are student with 6 modules, no one wants to repeat something they have already because someone was inconsiderate.. #dammet

But we all humans and make mistakes, who ever did it, I forgive you,just get your act together :)

With regards to the blog, it was great to blog again. I was introducing to blogging during my first year at varsity, through the course EED. Blogging is fun though, but it is not something I find myself doing on the regular. I prefer reading the blogs and not the one whose doing the blogs. But I must say, the introduction of electronically doing work in sport psych has shaped the future for most of us. Its a great experience, although you suffer the consequences of not saving your work, but totally worth it

oh yeah SPORT SCIENCE CLASS OF 2013!!!

Reply

12.

[redacted] 3315505October 16, 2014 at 4:18 AM

My experience of using a wiki was both challenging and rewarding. It was my first time using this technology and therefore it took me a while to adjust to this new tool and discover all of its possible functions. The challenges I encountered included uploading videos and pictures. As these were taken

with my phone, I struggled to first upload them onto my computer and then onto the wiki page. Eventually, after many attempts and seeking advice from my classmates, I succeeded and therefore it was rewarding. Another challenge for me was dealing with the technical glitches which I encountered when creating the profile, such as words going missing and unintentional links being added. This occurred near to the due date of the assignment and therefore it was a bit stressful to have to redo a certain part of the assignment, only to see the same glitches had appeared after I had saved and logged back onto the wiki. After many attempts at this my work was eventually rectified and it was rewarding to see the final product looking like I wanted it to.

It was fun to develop a sporting profile of my classmate and to continuously add information to it and tweak it as each day went by. It refreshed my educational experience as it was different from the usual method of submitting hard copies. I learnt how to use many computer-based functions that I previously did not know how to use, such as adding links. I felt free to use my creativity and the wiki assignment also assisted me in learning and understanding the content, within the parameters of sport psychology, as we were encouraged to practically use and associate the information we learnt within our assignments. It was also interesting to read through other people's profiles and learn about their sporting backgrounds, triumphs and failures. I am not familiar with everyone in the class and therefore it provided me with an opportunity to learn about these individuals and what gives them their identities.

Commenting on the blog regarding aggression was a lot easier but not as fun as using the wiki platform. It felt good to express my views regarding aggression in sport and to read what my classmates had to say regarding the subject. Again, it was refreshing to use a technological tool as a part of the course curriculum instead of the usual method.

Overall, I enjoyed using these new technologies as I learnt a lot regarding the use of these applications. The world today is predominantly technology-orientated and therefore I feel that it is important to be able to use wiki and blogging tools in order to not fall behind and stay relevant with regard to modern technology. I would recommend the continuous use of these technologies for the Sport Psychology module. – Braeden Steyn 3315505

Reply

13.

[redacted] October 20, 2014 at 12:29 AM

My experience with using the wikispaces site was both negative as well as positive. The negative side to this activity was that it had to be done online, and seeing as I do not have access to the internet at home for my laptop, I had to go in each day and type a little bit of work each time. To get everything done at once I decided to type and construct the information at home on Microsoft Word, which was quite convenient because then I could copy and paste everything into the wikispaces document. However, after all the hard work and time spent on this project I came to find that it had to be redone because we were not to copy and paste from Microsoft Word into the wikispaces document. I had to retype everything onto the wikispaces document which was double work and I lost valuable study time. I feel that if we were told from the very beginning not to copy and paste from Word it could have saved a lot of time and effort. I also found this assignment rather irrelevant because I do not fully understand how using the wikispaces relates to Sports Psychology. Another aspect that I did not like about wikispaces is the fact that everyone on the site had access to everybody's information and was able to edit each other's information, which meant that they could easily delete or copy your work and paste it onto their page. I found it quite tricky to add pictures into the wiki because I was unsure of how to upload images, but I eventually figured out how to do it and I could help the others who were also struggling.

What I enjoyed the most about the wikispaces site was getting to know my fellow classmates, by learning more about their background and where they "come from". Being able to see what sporting activity they participate in and enjoy most. It was really fascinating to be able to see videos and photos of certain people. It was amazing to see the individual in their element and how different they are performing compared to seeing them in class. I never knew that there were so many people in our class that partake in diverse sporting activities. It was also quite interesting to conduct an interview with my fellow classmate and friend. Her personality is completely different to when she plays rugby. She is a very soft person when she is off the field, but as soon as she gets onto the field she becomes more aggressive. I got to discover much more about her family life and childhood than I knew before. Another aspect that I was really fond of was the fact that we could comment on each other's wikis. I could help them improve their wikis and they could help me to improve on my wiki. We could also commend each other's work, which was awesome.

Reply

14.

[redacted] October 21, 2014 at 1:43 AM

When I first heard that we had to do a wiki assignment I was worried, because computers and I don't go well together and I thought the task would be challenging as I had never used a wiki before. When I started working on my assignment I realised that it was not that difficult after all, the only challenging aspects were uploading files which I managed to do except for a video which was a step out of my realm. The assignment was exciting as it provided an opportunity for you to get to know your classmates better as you can see there background and actually notice how similar it is to yours regarding the sporting front. When it came to commenting on one another s assignment it gave an opportunity for us to view each other's wikis which was nice and interesting as it gave us the opportunity to read about people in class whom you don't know and have never spoken to them. The only real aspect I did not enjoy about the assignment was the fact that anyone can change anyone's assignment I could go and literally delete everyone's assignment if I felt like it and saving the assignment to word messed it up which meant you would have had to re edit it again. I had this problem as someone copied my assignment but I managed to change mine just before cut off deadline to ensure it was different. The other aspect was when you upload a picture and save the

assignment when u log in again the picture changed to someone else whom I found was a bit aggravating as you had to upload the pictures from scratch. Nonetheless the assignment taught me how to do wiki assignments, how to blog and gave me the opportunity to learn more about my fellow classmates. With regard to the fun side of the assignment it was fun to find out all these cool facts about your classmates such who has provincial colours, who has national colours and this was interesting facts to find out which we would have never known without this assignment. I also feel that maybe the assignment should have had an average word limit which would have helped us to gauge our assignment according to the word count, because some assignments were extremely long and well planned where others were a few paragraphs with one picture.

I learnt a lot computer with this assignment as I generally stay away from things such as blogging and uploading files etc. it was something new refreshing something I can move forward with in life and perhaps use wikis, when I further and my studies and even during my career. Good luck to everyone for exams study hard! Hard work dedication!

Reply

15.

[redacted] October 21, 2014 at 3:35 AM

The idea of doing this wiki assignment was actually really creative because doing it this was gave each and every student the ability to view what other students are doing and learn more about theirfellow classmates aswell.Besides all of this it was really just a unique experience for me because i have never done an online assignment like this in my life.It made me enthusiastic to start because of this uniqueness i foud within doing the assignment because usually i just do assignments and print in on a standard A4 page and then hand it in so overall it was a really facinating experience to see what we were all writing about,

one downfall about Wikispaces is that at first glance it seems a bit complicated and i was not really sure where and how to do things like add links etc so i think on the user interface standpoint it can do a bit touching up and not on the visual aspect,thats fine its the ease of usability for me that i found a bit tricky but seeing that this was such an interesting assignment i could easily look past that and i was ready to tackle any task that came my way. Another problem i would find with the idea of doing the assignments this way would be that internet availability would be a neccesity.So the only time someone would be able to do a wiki assignment is if they are at camus granted their is no internet by their homes.Also if a crash occurs or the internet connection fails before you save it it could lead to lost data i havent encountered thhis but a few people i know said this hashappened to them.

Overall i would give wikispaces assignment a thumbs up because not only are we writing about ech other but the fact that we get to see udates about who did what and when which really adds a whole new dynamic in doing an assignment which couldve been done the old ,boring way.So im glad and happy that we did a wikispaces assignment and i would say it was a pleasant experience.I think student that are going to be doing this module in the future can look forward to a really entertaining unique experience rather than doing assignments the normal way.I think it could actually help students work harder because others see yoour work and you see how far others are and you know when your lagging behind.This happened to me so i would think it could happen to other people who are concious about their work

Reply

16.

[redacted] October 21, 2014 at 3:35 AM

I have always wanted to write a blog so when I heard I was going to use a wiki and write a blog for the first time I was rather excited. I caught on easily with using and understanding how blogging works which was at my advantage because I could then finish it before it was due. I think blogging has its advantages and disadvantages. Its advantages being that it easy to understand and is not overly complicated. Creating a blog account is relatively easy so blogging comes with an easy interface to use. The disadvantages would have to be relating to the fact that it does not give the same feeling when communicating on a blog as it usually does when communicating in person. The advantages in relation to the assignment is that it allows not only me, but everyone else doing the assignment to get to know classmates through each other's blogs. Another advantage of blogging in relation to the assignment is that it allows people that are known and that are seen as quiet, to interact with fellow classmates.

What I found pleasing about the wiki blog was that I could use a word and attach a link to it, so when someone clicks on the word, you can go to the website where I got the information from. I found this useful for myself and others. If others wanted to find out more about the word or sentence that the word was in, all they needed to do was click on the hyperlink and they would go directly to where they wanted to go. Interviewing classmates about themselves and their sporting life I thought was really enjoyable and interesting because I learnt more about my friend whom I interviewed and I learnt more about my fellow classmates.

I am not a person that spends his days typing on word so the wiki assignment took a while. The wiki layout is also somewhat different to word so I had to adjust which made me take longer than expected. I also had to upload pictures which took some time because it was a complicated process. Wiki did not have auto correct or spell check which meant I had to read through my assignment afterwards which caused more hassles and it just took too long. What I really did enjoy about the wiki was that you could comment on other peoples work in a constructive manner which helped me improve my wiki assignment.

Overall I enjoyed the wiki blog assignment because I now know more about my fellow peers and I can now say that I have successfully blogged. The wiki assignment idea in my opinion should continue as it is enjoyable for all and it makes interaction easier for people that are somewhat reserved in person.

Reply

17.

[redacted] October 21, 2014 at 3:49 AM

when i first received the email saying that we have an assignment to do on wiki space i was confused and did not know what that was or how to go about completing it. then asked around if anyone else knew what was to be done, i even asked my family and friends that are not at university and still no one could enlighten me. i then figured that the only way i will be able to do the assignment was if i experiment on wiki. i then played around on it and sort of found my way around it. to me the assignment was very interesting because we had to write a report on a classmates sporting career and also how far they took it. this to me was a good assignment because it helps us get to know more about the person we doing it on, things that we would never find out normally. i personally feel that the wiki/ blog is a good thing to use in the future even though its hard if one has never used it before. maybe they could get someone to explain how it needs to be used. while using the wiki and doing the assignment the part that got me really excited was when i could upload videos and links of certain aspects of the persons sport. even if it had nothing to do with him. the weird part of the wiki at first was that anyone else could access, read and comment on it, but after a week or two i then realised that it was the perfect thing because u can see where you went wrong and you could correct it. i also enjoyed reading what others wrote because in that way i could learn more about my classmates. this was my first experience of blogging and i find it okay for now. im not really a person that would sit on a pc and chat, i prefer speaking face to face with someone. hopefully in time things can change and it will become easier to use it.

Reply

18.

[redacted] October 21, 2014 at 3:50 AM

When we first started working on the wiki assignment, I didn't understand the difference between the online task and just handing in a hard copy. As the assignment progressed, i realized all the exciting things that you could do on wiki, which you couldn't do on a hard copy. Things such as adding videos, hyperlinks and pictures were just some of the positives of the wiki assignment. I found using Wiki very enjoyable, it was easy to use once I got used to the website layout. It was also really nice to learn new things about students in my class. I didn't know half the sports the students played in my class and now when i speak to them, we have something to chat about. The Wiki assignment also gave me the ideal chance to go through my sports psychology textbook and learn things i hadn't learnt before.

One of the obvious challenges faced by most students, was being able to understand the wiki technology. I consider myself well advanced in the use of most online technology, however, it took me a good few days to understand the full capability of the blogging website.I believe the tutors, should understand how to use the wiki technology, so that if a student does have any questions, the tutor can help them during their tutorial slots. Another challenge was knowing if I had enough information in my assignment. We weren't given a word limit or maximum so it was tough to know when to stop.

All in all, i felt this assignment was a great success and that the sports psychology students next year will thoroughly enjoy it. Being criticized by fellow students in the comment section was encouraging because it was kind of like peer assessment. I am very excited to tell people that i have blogged and that i am able to help them blog if they wish too and this is all thanks to the Wiki Assignment and all the skills it has taught me.

I hope the sports psychology department continues the WIki Assignment for years to come because it makes learning exciting and brings a whole new dimension to studying.

Reply

19.

[redacted] October 21, 2014 at 4:25 AM

my experiences of the wiki and blog were not very good. yes there was positive points like reading up about fellow students and getting to know them better but overall i did not enjoy either assignments. the wiki assignment i feel was too time consuming and then added to this we had to re-do our assignments because we "copied and pasted from Word" which in my opinion was not relevant. even if we typed it up in word and pasted it on the wiki it was still our own work. going through the trouble of re-typing the assignments i feel was not necessary. i feel like non of these assignments helped me in anyway with the module. in future if the department wants to do something to this affect and use tools we learnt in class they could make use of questionares, the wiki in my opinion is just too time consuming.

Reply

20.

[redacted] October 21, 2014 at 10:00 AM

When I had first learnt that we would be doing this assignment i was quite skeptical as i had never done something like this before. All my previous assignments were assignments where we would have to hand in hard copies and portfolios etc. I had told my mother about this as she was somewhat a guru with computers, even more than i am. All she had said was that i should go into it with an open mind because it might teach me something, something i had not known before, something new. i had chosen to do my assignment on my good friend Matthew Parker as i had learnt a lot about him in recent time and i thought of this as a way to get to learn even more about him. i feel that the wiki way of doing this assignment was good but in my opinion it could've been better. i say this because i had typed my assignment, well part of it and saved it. and every time that i went back onto the site i would notice that my work would be edited with a whole lot of random text and even more random pictures of ponies and carrots. i feel that if this assignment is given to the group doing Sport Psych next year that it should be password protected so that other students could read your work, but could not have access to editing it in any way or form. i never experienced this but a friend of mine had his entire assignment copied and pasted by a fellow student, i think that we could avoid this by giving a no copy option on text as students would copy and paste others

work and use it as there own. this is why myself and i would assume countless other students opted to type the assignment out in a word document as it would be protected and safe on there own personal laptop, computer or stick, intending to upload it on the wiki space right before deadline as this would leave no time for other students to steal your work. when this had occurred we were told we had to retype our entire assignment as it wasn't the correct format or the links could not open or something to that extent. also the wiki would be confusing at times. however enough about the downs, there were a few upsides to doing this assignment as it would put us youngsters behind a laptop or computer, something that the majority of us enjoy as it is technologically based. the assignment meant that we would need to physically interact with one another and ask questions about what the had done, where they had been and what the outcomes of it were. we also would need to apply ourselves which i must admit was time consuming, but it was something new and interesting as we had not done anything like this in any other modules before. overall i think that there are slight problems in the wikispace assignment however if these problems are solved this could be used for many years to come and could become a huge success as students would enjoy it without the difficulties that it is currently posing.

Reply

21.

[redacted] October 21, 2014 at 11:44 AM

When I first heard about the Wiki assignment I wasn't sure what the real purpose of it was and the difference it is between handing in a hard copy. It is an innovative idea and I now can see the purposes of it. It is a good way forward as now days everything is done via computers and different sources of technology.

I did feel that there were a number of very good aspects to the wiki page as you get to learn from your class mates work. You also get to know a bit about the people in your class which aids conversation topics that you can have with them. Once I knew how to use the wiki page I found it very easy and helpful. There are certain things that you cant do with a hard copy such as you tube videos and links. This makes your work look so much better. It was enjoyable looking for pictures and videos to beef up your work. It also is very efficient and easily to access,this is handy as modern society is very impatient.

I personally am not the best with technology so this at first was a bit of a challenge. I did struggle at first but once I knew what I was doing it turned out to be a lot of fun. I feel that the tutors should be aware of how the wiki works and be able to help you in the tuts. The other issue is if you don't have internet or your internet is down. I also find the lack of word count fairly challenging as you don't know how many words you are writing.

The actual assignment was very interesting as we got to see the sporting achievements from our class mates. I imagined myself as a sports journalist and feel that it is a very good skill to have as it could be a job opportunity one day. I also learnt alot through this wiki assignment as i could read my class mate work and see how they structure and respond to questions. I thought it is a very good way to learn sections in the text book as it covered an interesting section.

In conclusion I really enjoyed the wiki assignment and I found it as an interesting way of doing work. I enjoy the blogging aspect and find that it is the way forward and is nice to be able to share your views. I strongly feel that this should carry on next year as it was an innovative way of doing things.

Reply

22.

[redacted] October 21, 2014 at 12:23 PM

The Wiki Assignment was foreign to me. I had no idea what the whole wiki page was about. I have never heard of it before so it was completely new to me. When i found out that I had to interview a class mate it made a bit more sense because I am familiar with my peers. At first I was told that it had to be a athlete, but when I read it on my own I came to learn that it was supposed to be someone in my class that will be interviewed as an athlete. This assignment made me learn so much about my class mates and what they participate in, in their leisure time. When I had to type the assignment on wiki it was challenging because I had trouble uploading the pictures. My classmate that I interviewed helped me upload the pictures and also directed in as to how and where to type the assignment. I am not very good in all the latest technologies so this task was challenging for me, but I am glad I completed it regardless of my lack of computer skills. When it came down to the interview itself it was great because I knew the person I interviewed since last year so there was no awkwardness of any sort. Conducting the interview made me learn so much new things about my class mate. Reading through the other assignments and watching the videos was also nice to see because you lean so much new things about the people you see everyday. The wiki assignment was a good experience that I found challenging. Because I had so much other assignments due during that time I found myself just wanting to get it done. Because of my lack of computer skills, this wiki assignment made me learn new thing, like how to blog and how to conduct a proper interview even though it is with someone you are familiar with. If I had the chance to do the wiki again I would, because then I would know what to do and put in more effort. This wiki assignment had me doing research on the internet and I also had to go back to my textbook to do additional readings on what I was researching. This helped me with my overall studies of Sport Psychology. This wiki assignment was a nice way of getting to know my peers better. Getting to know their interests outside the class room and also their life story regarding their sport fields. I now look at my peers with respect and admiration because of all they had to endure to get where they are today. Hopefully the wiki assignment will become easier for the other students once they have to do it. More to the point without all the unnecessary difficulties so that they can access it easier and also upload things easier. Its good to know that we are all still keeping up with this world of technology and that it is still keeping us on our toes

Reply

23.

[redacted] October 21, 2014 at 12:43 PM

This essay was a bit of a struggle for me in the beginning due to me not being too good at working computers. It also made me nervous as what people would think of my work but it helped me in the end. In the beginning, I was confused as to what exactly we had to do but by me looking at the example on the website, it guided me and showed what had to be done. The other aspects of the assignment that I had difficulty with, was the hyperlinking and referencing. This took a long time for me to figure it out but it was worth it in the end. The reason being was because I learnt new skills and would benefit me in the future.

When doing this profile on Sean Gomes, I learnt a lot about him and understood what type of background he came from. It was not hard to find information on him seeing that he played amateur cricket and is on a number of websites. It was very easy to interview him due to us seeing each other on a daily basis. Typing this information was the easiest part of the assignment but I had difficulty uploading the pictures. I also went through a few others profiles and learnt a lot about other people seeing that I am not familiar with everyone in class. Doing this profile on the computer saved so much time and effort and you were even able to change certain aspects of your profile if you wanted to.

The aggression forum was very boring to write about but to read about everyone's opinion on how they feel towards the issue which made it interesting. I preferred doing the profile compared to the reflection and aggression forum due to it being more fun and refreshing. Even though some areas were very difficult, I would like to do another assignment like this one, even though I am not much of a blogger. This type of assignment also helps to involve the whole class and not just some individuals who help let's people express their opinions.

This wiki assignment has been enjoyable and fun. I would recommend this assignment which helps people learn how to work a computer which is considered a skill in today's world. It is a creative way of doing an assignment and I would enjoy doing a similar sort of format based assignment.

Reply

24.

[redacted] October 21, 2014 at 12:47 PM

My experiences of designing a wiki were pleasant and at the same time unpleasant as well. The fact that I am new to the whole blogging vibe made me a bit sceptical in tackling this assignment. Initially I struggled to put my wiki together; adding a picture, changing fonts and embedding a You-Tube video was quite challenging to me. However, once I managed to familiarise myself with this new phase of technology I was on board with my assignment.

I felt like I was getting somewhere once I started my wiki because I had completed my introduction and I was satisfied with it, after that I logged out. A few hours later I decided to continue with my wiki but then I noticed that one of my pictures had been changed and this happened to me thrice. Now this is what pissed me off. The fact that other students can edit your work is really maddening because anyone can just decide to erase all of your work without you knowing and at the end of the day you sit with a bad mark. If students can even have access to your work by just viewing it and not editing it would've sufficed better.

I thought it would be a clever idea to first type my assignment onto a word document and then just copy and paste it onto the wiki because it would be easier and less work but then I received an email that read it shouldn't be done in that manner. To retype all of that work was kind of unnecessary and it was problematic for me because I didn't have access to the internet at home at that time.

On the other hand it was quite a pleasant and educational experience for me despite all the negative technological aspects of the wiki itself. Being able to know more about your friend's sporting career and how they achieved success throughout the years is rather fascinating. Finding out about family history and what motivates other people kept me intrigued. There can be a lot of originality when designing your own wiki and this is what made it fun for me. The creativity level of designing your own wiki is what kept me interested in completing it.

The fact that we could view other students' wiki assignments was rather fun because it is almost like I can read someone's life story through their wiki. I think reading other peoples wiki assignment was the best part for me because I learnt many things about my classmates that I had absolutely no clue about. However, the hardest part for me was to research certain recommendations tools to apply to the athlete I was interviewing.

Seeing that we are living in a technological based society, overall, I think this wiki assignment was a good learning experience for me. Being able to adapt to the technology aspect of things was not too bad in the end, even though I could improve on my wiki.

Reply

25.

[redacted] October 21, 2014 at 1:30 PM

when I first saw the email saying that we must do a wiki assignment, I was very confused as I didn't have a clue what this was about. My knowledge of computers is not up to standard so weeks leading up to the due date I asked around and got a better understanding of what needed to be done. I then started playing around with it and figured that it was extremely easy to use. The biggest thing that I liked about this assignment was that I got to learn more about some of my friends. I knew they were

all sporty but it was nice to hear their background and all their major achievements. There were also fellow students in the class who I don't normally socialise with that I learned so much about. The biggest challenge that I faced was logging in to the wiki site. Often when I tried updating my profile I could not even get on the site. But all in all I enjoyed it and it was good fun reading about fellow students sporting careers.

Reply

26.

[redacted] October 21, 2014 at 2:33 PM

When I first heard that we had to write a wiki about one of our classmates, there were a number of questions that crossed my mind and the one that was the most persistent was " What do I even write about him/her, like what do I say?" As time progressed though these questions were quickly answered in both class and in our tutorial groups.

I had mixed emotions when it came to this assignment because I'm one that doesn't like working on academic tasks in groups and now I felt that I had no other choice but to do so. My biggest concerns when it came to doing this task was that it meant that I had to be completely dependent on someone else for information and if I pick the wrong person, it could hinder my chances of getting good grades. As time passed though, all the negativity I had towards the wiki had shifted drastically. I've always been the neutral student that isn't too worried about making new friends but rather going to class and doing what I needed to do then leaving and that meant I wasn't too familiar with my class mates. The assignment made me step out of my comfort zones but at the same time I got to learn new things about people, especially those that I thought I had known well already and it was extremely interesting.

The wiki is a good platform for people to interact with one another and it is an extremely useful informative tool. My suggestion however would've been to maybe include this assignment for first years at the beginning of the year. Reason being that we are fresh from high school and know nothing about our new classmates. This would go a long way in making new friends and the transition into University much easier.

I however did not find it that difficult. It frustrated me a few times because you constantly have to search for different information from your client and luckily in my case the person I was writing on was a very active person especially from childhood, so it meant that there was a lot of things I could say about him and he had a really interesting journey. The only disadvantage one would have is to write on someone that didn't really do much meaning that the information is extremely limited.

The biggest challenge I experienced with regards to this assessment was that I do not have internet connection at home, so having to come to campus to do the assignment was a major hassle for me.

In conclusion, I really enjoyed doing the wiki it was extremely fun, but long. Reading the work of our fellow classmates was the best part of the whole assignment as we realized things about one another that we had not expected at all. Technology is developing rapidly and its nice to do work that is slowly tryng to keep up with it in an academic perspective.

Reply

27.

[redacted] October 21, 2014 at 3:20 PM

When I first heard about the wiki assignment, I was not sure how to do the assignment and I had never used a wiki account or read a wiki page or blog before. I was anxious but excited to learn something new as I like working on and learning new computer skills.

I really enjoyed doing this assignment, as I got to know my classmates better. Also by applying the information learnt in class and from reading the textbook, by using it in a practical way made the work easier to understand and easier to remember. Using the wiki for the assignment was a nice way for everyone to get to know their classmates better and also to learn more computer skills. I really enjoyed adding the pictures and videos to the assignments, which makes a good visual for others to understand. I had some trouble uploading the assignment at first, but after a while I got it work. I did this by doing my assignment first in Microsoft Word and using copy and paste to get the assignment on the wiki. Also at times logging on to the wiki was difficult. At first I did not enjoy the fact of commenting on others work, but someone commented on my work, which made it more comfortable for me to comment on others. I also did not like the fact that someone could go and edit your work. Overall I really enjoyed doing this assignment and would recommend doing future assignments on the wiki page.

By having a class blog really gives all students an opportunity to participate in class discussions and get other people's opinions. Also helps to get a better understanding of the work. Overall I really enjoyed using both the wiki page and the class blog. I hope they keep this for future use, as it helps with both computer skills and academic work.

Reply

28.

[redacted] October 21, 2014 at 4:03 PM

When I first heard that we had to make a wiki I was clueless and thought "oh my word" how will I get this done? what will I do? And who will I ask to help me?

Starting off the assignment and interviewing Shane was time consuming, boring at times, but also had its perks, because we were fooling around and at times just talked about random things we did during sport at training and at competitions. Most of the things we talked about was related to our sport and our passion for it. Our little discussions helped us work through the basic things we needed to know. Soon after we got done with the basics the assignment started shaping and we were on a role to get it done. We had so much information about each other we did not know what to add or leave out. Initially I decided to start with my wiki. At first I thought "ahhh piece of cake" until I actually had to post my information online. I experienced so much trouble I was about to lose it, so I consulted a friend that already did the assignment. After all the struggle, I found designing the wiki pleasant and challenging: changing things, adding, deleting, making it creative and looking at others work for ideas. Some of the information that I had to research was intriguing as it focused on

my field of expertise and which I can apply to my sport as well. I learned a lot more about Shane while doing this assignment than I did in 3years, so I found this experience quite phenomenal.

One of the most impressive experiences that I have had with my assignment was Reading the work of the others. It was interesting and helpful at the same time, it helped me a lot in seeing how others perceive and portray themselves.

Some fascinating information about the people in my class came forth and reading their blogs was an awesome experience, who would have known some of these individuals have these incredible sport talents, if it was not for the wiki assignment. So many times we get caught up in our own worlds that we do not attempt to get to know one another, even on a first name basis, because we might be shy or some of us are just scared to be rejected, or feel that we don't fit in. That's why doing the wiki assignment helped me get to know certain things about my fellow class mates and can also be a good method in getting to know something positive about someone. We do not all have the same levels of confidence or self-esteem in class or around others, so blogging can be a way of getting out of our shells and to share a little about ourselves with other. I personally find no trouble communicating face to face with people, and prefer face to face communication but blogging as a way of communication can benefit those who find it troublesome. Overall I had fun and enjoyed the assignment

Reply

29.

[redacted] October 22, 2014 at 1:10 AM

Honestly I enjoyed using a wiki and writing a blog. Life was made so much easier for me when everything had to be done online and a computer had to be used to do everything. The wiki assignment was very nice for me to do, as I didn't find it hard to use most of the resources of the wiki and finding the information that was relative to my athlete, Quaid Langeveldt. At the same time, the wiki assignment made me find, learn and understand new things about people and how the behave and act, my sport (rugby) and the different ways in which a player can constantly improve himself/herself, and using specific tools and ideas in bettering yourself as a person physically and emotionally. In terms of myself, I now possess the necessary tools to get my to a level that will benefit me as a player and benefit my team to make them even stronger than what they already are. Even away from the field, I have acquired resources I never known with it comes to computers, wiki's, blogs and even writing up about someone. I didn't really find it challenging, as it was very easy to catch on what was required of me and the necessary tools I needed to complete the assignment. What also helped me a lot was the textbook and the little lecture slides provided, which gave me a clear and precise definition of some key points that I need to complete my assignment. Working with Quaid help me understand him better as a friend, teammate and as a classmate. I now know what most of his strengths and weaknesses are and how we can help each other improve in the classroom/lecture hall and on the field. Before I even started with the wiki assignment, I had already drawn up an idea in my head of how I'm going to approach it and where will I find the necessary information. I must say, YouTube has helped me out immensely, with all the different kinds of videos of almost everything! Yes, there may be too many videos on one particular topic, but then it just shows how people can see or come up with different variations of things that in turn help you solve the main point. For example, when I typed in 'rehabilitation for knee injuries or surgeries, I was practically spoiled for choice and none of them where incorrect. It really does show you that a lot of resources are out there and is just a matter of going out there, looking for it and applying it to your daily lives. I really do see the wiki as a useful tool to teaching and if made much easier to use, can be a very effective tool. In a nutshell, the assignment was very enjoyable and fun way of doing something that was for marks. I definitely see it as a helpful tool in the future and it will help so much more with the bettering of educating other.

Reply

30.

[redacted] October 22, 2014 at 1:37 AM

Personally I have got mixed feelings when it comes to using Wikis paces for the first time. Especially when it came to compiling the sport psychology assignment on the player profile. The blog is very similar to Microsoft word in the way that it operates and its layout, which made it easy to use. Which I think was a big positive. Uploading pictures, captions and links were relatively easy to add to the page. What also worked well was the fact that I could save the alterations that I made to my assignment and come back to it. Meaning that I didn't have finish it all at once. However I had some difficulty uploading the video clips I had prepared for my assignment, even though we had instructions that we could follow I found it to be very slow and time consuming. Leaving it out in the end, knowing that it would have an effect on my final mark.

The fact that we could comment on fellow classmate's assignments was also very handy as I took some of the advice given to me, such as adding more info and changing my layout. The biggest problem for me lay in the fact that we were allowed to access other peoples pages on Wikis paces, which meant that your page could be tampered with or in some cases that was evident people who had not done their work copied and pasted assignments which wasn't their own work. I personally had make changes to my assignment numerous times, when people had accessed my page and changed things like pictures and spacing on the page. This was annoying at times as I constantly had to check the page to make sure that everything was in order. Especially on the due date of the assignment. Although it might have been a useful tool whereby we could compare our work to others and make comparisons to those who had put in a lot more effort, I definitely think that it should be looked at for next year.

What I really enjoyed about the assignment was the interview process, whereby we got to learn a lot about the person being interviewed. I learnt a lot about Brandon Conradies sporting achievements especially in the field of cricket and what motivated him when it came to playing the sport that he loves. This was very useful in that he plays in the same cricket team as me for the University. The compilation of the assignment took some time as there was a lot of questions to be asked and exchanging answering sheets and getting evidence in the form of certificates and pictures also took some time.

Ultimately I had a lot of fun compiling the assignment as the information actually helped me a lot, however I think that there are some things that definitely can be improved on in terms of plagiarism and copying.

[redacted]

2814457

Reply

31.

[redacted] October 22, 2014 at 1:46 AM

I found it difficult to step out of my comfort zone and do something new.

My bad attitude towards the assignment has disadvantaged me in a way that I only started with it a few days before the due date, only then I had discovered problems logging in. I had to be re-invited to begin with the assignment. When I eventually started with it I wished I had started with it earlier because it was not as challenging as I thought it would be. The challenge I came across was posting a picture and a video. I struggled but with the help of others I finally got it right.

The wiki was a good experience though what I did not like about it was the fact that everyone had access to the other person's assignment and to make changes, I was afraid that I would log in and find my work gone, however the advantageous part of it was that people could comment and help with making improvements. Even though, I was not comfortable with it hence I typed the assignment on Microsoft word, copied and pasted it onto the wiki space on the last day. I found out later on that it is not up to standard when done that way. The extension really helped me a lot to make necessary changes.

I enjoyed knowing more about my classmates, especially the person I have written about (Boitumelo Sebigi). It was interesting knowing which sport she prefers, her reasons behind her choice, and what keeps her motivated. Before the assignment Tumi and I would talk about a lot of things, but she never mentioned it to me that she is passionate about cycling. This assignment has given me an opportunity to know new things about her.

Through interviewing Boitumelo, I have realised that personality plays a huge role in a person's choice in sport. I enjoyed reading more about sports, personality and motivation on literature and relating it to my athlete. I think if I had started the assignment earlier I would have improved on a lot.

Besides all the issues I have experienced with the wiki I am happy that I have learned a new skill through Sport Psychology, and would love to use the wiki again for other assignments.

Reply

32.

[redacted] October 22, 2014 at 2:01 AM

The day i first heard about creating a sport profile, the thought of it blew me away with excitement. Not only have i been required to create a sport profile, but also a blog as well as a wiki page. At first it was a struggle, due to the fact that i am starting this project with limited knowledge. I felt totally overwhelmed with everything, especially since this was totally new territory for me. However, after gathering the information and playing around on the various websites, i quickly got the hang of it and met the required outcome.

Never in my life did i think i would have create a wiki page or blog. The struggle at the beginning of the assignment was a real challenge, but with that been said, i really enjoyed the experience and doing something knew took my knowledge to a whole new level. It was definitely worth it. I got to learn new skills and being able to communicate with one of my classmates about sport, which is my absolute passion, was the icing on the cake. Interviewing my friend Desmorine was awesome. You could see the how much love and passion she has for the game. What i also enjoyed about the wiki was the fact that i could learn more about my classmates. Being able to share experiences, reading their stories and achievements was amazing. Our interaction left invaluable memories. If it wasn't for the wiki i would have never stumbled upon the variety of sport that existed in this class room.

Now for the negative part. What i didn't like about the wiki, was the fact that we couldn't do it on a word document and just copy and paste it onto the wiki. Due to this i had to retype the whole assignment on the wiki, which created more work. Doing this task online was also a slight problem, due to the fact that the internet at residence is not always available and not having a personal laptop of my own, i had to do bit-by-bit. It took quite an effort, but at the end i think it paid off.

The wiki assignment overall for me was and could be a great idea for the future. Its something new and fun to experience for the students still to come.

Reply

33.

[redacted] October 22, 2014 at 2:26 AM

Making use of the wiki was an interesting new experience and I feel as though it's a good idea to introduce new, fresh ways in which to do and submit assignments, especially considering we have all this technology available. Personally though, I prefer doing a word assignment, printing it and handing it in. I don't particularly like the idea of everyone being able to see my assignment, this could possibly be something positive, but it also leave a lot of opportunity for fellow classmates and others who view it, to copy work or "steal" ideas.

Despite this, if feel as though it could also be viewed in a positive light and as a manner in which students can learn from one another as well as about one another. It probably depends on peoples mind set and maturity.

Another quam of mine was that anyone could access your work and make changes to it, edit it, delete vital info and sabotage your work. This could cause serious issues, especially if this were to happen around the time when our work was due. If everyone took this assignment as being of vital importance and respected their classmates work, it would not pose an issue, but unfortunately not

everyone is mature enough to be considerate toward others, who have taken the time and effort to complete the assignment to the best of their ability.

The assignment required us to do a brief introduction on the classmate we interviewed and then to ask whether or not they used any psychological tools before or during sports participation; however if they didn't make use of any psychological tools, it somewhat prevented the assignment from being of much substance, as that was essentially what the assignments was about. So despite the introduction on the person and the recommendations, a large part of the assignment wasn't able to be completed if your candidate didn't use any psychological tools.

Lastly it was prevalent among the classmates that I had spoken to about the assignment, that there weren't really many people in the class "worth interviewing" as many of them didn't currently play any sport, had last participated in sports at school or had never even played sport. This was a problem considering only two people were able to interview on sportsman and we were unable to use people outside of our class. I am aware that external candidates make it difficult to control factors such as plagiarism but it would be a solution to a previous problem I mentioned, the assignment requirements not being fulfilled.

Overall it can be said that this was a good learning experience and most of us were exposed to using a wiki for the first time. It was a new skill learned which can only be valuable.

Reply

34.

[redacted] October 22, 2014 at 2:28 AM

The moment I heard wiki assignment, the first think that came to my mind was how am I going to do this, I am not good with computers, I literally panicked. But today i can tell you it was the best experience I had doing an assignment ever since i got to UWC campus, It was fun, exhausting , challenging, and not easy to do. The worst challenge i went through was the interviewing part, I did not know where to start with the questions? was my questions relevant for the task? what are my expectations. It was tough. I also got a little confused with inserting the video as I had no clue how that had to be done. I used google for every little thing that i stumbled upon, I could say google was my best friend through out the entire assignment. What i also found very interesting was the links we had to add to our assignments. It made my life so easy for me for the fact that i didn't have to retype a definition or explain something into detail. All you had to do was click on the link and everything will be lay out for whoever read my wiki page. I actually felt like a photographer during this assignment "a professional" in that case, I had to take a lot of pictures and videos for this assignment and that was the best, it kind of improved my photography skills. I didn't know that we had to type the assignment straight on the wiki page, i typed my assignment on a word document and all i did was copy and paste which was wrong. I had to retype it which was time consuming and exhausting as this was a big assignment.

I actually didn't know anything about rugby really but after interviewing my friend I gained quit a lot about rugby, I can confidently say i know my way around a rugby field. I was actually lucky to interview my friend Ezryn van Aswagen. I got to know more about her sports career in depth and what her vision are for the coming future. I also got to know all types of injuries that may occur during a rugby match and how it could be treated. This blog project really enhance my knowledge with all different kind of sport codes.

I definitely would recommend anyone to do this assignment. I see the wiki as a very useful method to enhance peoples knowledge,educating and its a very effective tool. And by having a blog really give the students time to communicate with each other and speak their mind. Some students hate face to face communication especially when it comes to speaking their thoughts or raising a question in class, what makes the blog interesting and easy for everyone to use it that you don't have to stand in front of the class to say what has to be said but type it. Simple as that. I really had fun doing this assignment.

Reply

35.

[redacted] October 22, 2014 at 2:36 AM

When we were told that we will be doing our assignment on a wiki and not the usual word document. I was baffled, anxious and scared and began asking myself all sorts of questions such as: how will I cope? Will I get the assignment done on time? Who will I interview in class? Why did the lecture ask us to interview someone on class and not someone outside of the class? However, as time passed by I got working on my assignment, but encountered some challenges along the way such as how to use the wiki and how to download videos on the wiki. I consulted the lecturer and I was assisted, this made things a lot easier and I was able to finish my assignment on time. Eventually, I got the hang of using the wiki and I was able to discover some things on my own like posting pictures on the wiki. Using the wiki to do my assignment was a new challenge but it was fun and I enjoyed it because I learnt something new. If I had to do it all over again I would do it.

However, when it came to the blog, I was impatient, frustrated and just wanted to give up because I kept posting my comment and it would not go through. I asked my friends in class and they could not help me because they had not posted anything on the blog. I then went and consulted the lecturer, but I still found it difficult to excess the blog. I then decided to use UTUBE to assist me on how to post a comment on a blog and there I got help and thus was able to post my comment. I was so relieved and happy when I finally got it and was actually able to see my comment because before I was not able to see it. I then told my friend who was also struggling to make use of UTUBE.

Lastly, I have learnt so much in such a short space of time and this has expanded my knowledge when it comes to using social media for educational purposes and being able to express myself. Although I faced hurdles along the way it was worth it because I got to learn in the process and the wiki assignment was for us as a class to get to know one another and not just be in our regular circle of friends. Using the wiki and the blog made me come out of my comfort zone which was difficult at the beginning but later on it became easy. For some of us it is a good way of even starting our own blogs where we talk about anything and everything and be able to impart some knowledge onto others. Thus, social media can enhance our knowledge if used for educational purposes and a way of express oneself without being afraid to do so and for some it can build confidence.

Reply

36.

[redacted] October 22, 2014 at 3:24 AM

At the beginning, my first impression about the wiki assignment was good as I saw it as an opportunity to learn something new, but that was quickly changed by the very frustrating experiences as I was doing my assignment. I had difficulties with logging in and after spending long time struggling to log in finally I managed to log in, and I thought there will be no more drama.

I started my assignment, wrote my stuff and then posted online, and then said to myself now am done. It was about a week later when my friend asked me to show him how to open wiki that I realized that my assignment was not appearing, in fact it was not even there so I had to start all over again.

At that time I started panicking and question the design of the assignment. I thought it would have been much better if we had to type the assignment and print it for submission. I was think that I will not have enough time to type the assignment all over again, but luckily I managed to do so. At the end of the day I learnt a news skill “how to blog”, but am still yet to master it. Hopefully in the near future I will master it, because before the wiki assignment I was clueless when talking about blogging.

If one would take away all that obstacle that I faced in doing my wiki, the experience would have been more enjoyable, because other than the obstacles I loved interviewing my classmate and got to know about their life in sport and also share my own stories.

Reply

37.

[redacted] October 22, 2014 at 4:13 AM

When hearing the word Wikispaces it really intrigued me, I really wanted to know what this assignment was about and how one should go about completing it.

At first I was a bit scared, due to the fact that I have never used a blog before neither have I ever even seen what exactly a wiki looks like. It made me feel really computer illiterate, but as I opened myself up to using wiki spaces I began to enjoy it a bit more. I thought it would be challenging in completing this assignment as I have never used a blog before in my life and I did not even know how to sign in as a user. I decided to see this as a challenge that I need to overcome in order to broaden my knowledge on this module.

After speaking to my partner I realised that there was not much I knew about other sporting codes and how they work. I came to learn quite alot about my partner, not only about what she does and how she participates in the sporting world, but I also got to know her in a deeper aspect which was great. Because we see one another every day in lectures but, we never take the time out to actually learn about our fellow classmates and what they're really about. So to me this assignment forced me to step out of my introvert comfort zone, and to actually put myself out there to learn more about others. I now even go onto You Tube to watch videos of dance to open up my mind to different sporting codes and not only those that are field based.

I found the fact that we were able to connect links to one word really intriguing. I have never done that before and thus, I found it really interesting. I am now able to reference even better and I can now add citations into my work, which I previously could not do. I never knew one was even able to do this, and now having the knowledge on it I feel that I am now able to submit even better assignments with a greater research background and even more referencing. Also the fact that we were able to insert You Tube videos also excited me quite a bit, because the reader could now get a visual and audio aspect of my partner as well and not only just read up about her. To me it really felt like it made the wiki more personal and the person reading it may not understand the write up in the article, but after watching the video clip they could put everything together to get a greater and deeper understanding of not only the person but, also the sporting code that they are associated to.

One downside that I have toward this task though is that, one was not able to copy and paste from microsoft word. And because I typed out my interview on word first as i was not accustomed to the wiki yet, I found it really time consuming to do it all over again. But, one thing I can say is that it taught me patience, and that even though you fail at something, one has to get up again and do it over and learn from ones mistakes.

Sport Psychology has really taught me quite alot where the mind and sport is concerned. Also being able to comment on others work really helped, because I took the comments I received as constructive criticism and used it to improve my wiki, rather than allow it to break me down. I just opened myself to the opinions of others, and allowed it to improve me as a person.

This module has really broadened my view on the mind. I have come to realise that the mind is a very complex part of the body, and is most times underestimated. And if understood correctly, one could actually excel in the sporting world. If you use the knowledge of sport psychology to your advantage, you would be able to read your opponent and thus, you would have the upper hand in the game.

So, I can state that I have really learnt alot and I plan on using this knowledge that i have obtained to my advantage on the sports field.

Reply

38.

[redacted] October 22, 2014 at 5:46 AM

Whooooooooooo Wiki for me it was a wonderful experience specifically made for lazy people like me to improve their writing skills.I remember quiet well at first I was never interested at the assignment given to us for I saw it as a waste of time

When I had to interview someone in my class that do a certain sport to write on Wiki oh that was another challenge, There were instances that I ranned out of words and it seemed as if I was not even half way through to be done so I wanted to come with excuses like that I could not log in so that I get more time to spend on the assignment,but I had to do it anyhow.

I then started to pay more attention on the assignment, and what I liked is that since I did not know where to start I end up looking at the work of my classmates to atleast get an I dea of how do I go about with the assignment, Also having to comment to the work of my classmates it was not easy since I am kinda shy and I only socialize with a certain people not the other so that was some sort of an opportunity for me to give motivation to other people which is a good thing to socialize

Wiki and Blogging is very good I believe,but I will need people to participate faithfully and that's the best way for a multi-racial class to have the same mind of working together and with the involvement of the lecturer more can be accomplised to improve learning

Reply

39.

[redacted] October 22, 2014 at 7:55 AM

MY EXPERIENCE ON THE WIKI ASSIGNMENT

My experience using the blog was a bit frustrating at first because I could not post my work, this happened like five times. So I decided that I would not to do it at all. Then my friend always nagged me to take part in the blog and I thought I should try it out one more time so I eventually tried it out and it went through. I did the piece on aggression and I submitted and now I am happy.

It was a bit of a challenge using the wiki for the module because the module has so much information that must be understood so it was scary. I also a bit anxious to use the wiki because the whole class including the lecturer can see my work so that was nail biting experience. Though it made get more comfortable with my peers and build confidence with myself with my work, I do not want to use such a platform though it is much more convenient. A person must really have work that is above average to be able to post the work on the wiki. It was challenging also because I do not have internet at home so I had to wait to get to campus before I even was able to do the work. That was a let-down because I had ideas at home and the create juices were flowing, then I would have to wait until I got to campus to even begin to type the work.

I did enjoy it when it came to being able to upload videos and pictures to make the assignment more interesting. This at the beginning was a bit challenging because it took some time to be able to learn how to upload videos and pictures not the way I am used when using a word document, the person reading the assignment could play the content to better understand the assignment. The pictures made it easier to know who is being interviewed and see what they do outside the lecture halls and campus community for most.

I had always seen and heard about blogs but never took part in one. So that was a cool experience. It equipped me with knowledge of how the new age is growing and technology is advancing every day. It is a skill I will use for the rest of my life. Thank you for allowing the chance to get to know my peers more and allowing for interactions. I wish more modules would be more interactive so that it creates a space of learning in a much more interesting environment. At the end I really enjoyed it

Reply

40.

[redacted] October 22, 2014 at 8:52 AM

MY EXPERIENCES OF USING A WIKI, AND A BLOG

In my experience, the techniques of using a wiki-type program/application, for the purpose of a project or other assignment, and the activity of maintaining a blog, are quite similar, and both are efficient, useful and fun to use. An example of a wiki-type project could be the project done on my fellow student Amelia Adonis, and her sporting activities. In theory, the blog is the product of one person's work; it might be said to be 'owned' by the blogger, where the wiki project will be the result of a co-operative effort, and therefore not 'owned' by any particular individual. All the contributors can claim some part ownership of the project.

Both the techniques permit me to record the work of the project in a particular format. I can choose the format for the blog myself - unless specified otherwise. For instance, like millions of people the world over, I maintain a basic personal blog on my cell phone via Facebook's platform, which is a very useful and positive tool to stay socially healthy and in touch. Using the wiki program, I can retain or discard information. This is mandatory when working on a project, because the finished product is reached by extensive editing and amendment of the content - which must first be researched. The great benefit of these types of applications - especially wiki - is that the wiki-based project can be edited or modified by other contributors, while it is a work in progress. This does away with the need to create a number of separate projects, which must then be integrated by someone into the finished product. It allows for efficient co-operation between various contributors to the work.

I certainly do enjoy the techniques involved in using a wiki. The interactive feature makes a quick interchange of ideas possible. This is inspiring for me as a student. I also get to see how my fellow contributors think. It also allows me to get an idea of my own standard of work, in comparison to what my peers are producing. This is critically important for my motivation and inspiration. The wiki technique is also easy to use, especially with the modern software and devices currently in use, it is

simple to create and record on the wiki, and transmit it to others to make their input. Challenges can arise occasionally, for example with regard to compatibility of software. This can happen because not all collaborators on the wiki will have the same software or operating systems. This requires collaborators to think innovatively to solve the problem. However, it is usually not difficult to resolve this. Other challenges might be regarded as human issues, for instance where misunderstandings arise on the content of the wiki. In the case of the “Amelia Adonis” project, it was clear that some contributors attached more importance to the technical side of the athlete’s career, where others placed more emphasis on the personal feelings present.

In conclusion, the wiki and blog formats are certainly fun, and practically useful to me both as a working student, and an individual in society.

Reply

41.

[redacted] October 22, 2014 at 9:22 AM

When i first heard about the wiki I had no clue about the format of the assignment. The wiki was not what i expected as it is was really fun and convenient working on. The wiki is much better than having to wait in long line in the library to print the assignment. Therefore assignment could not be submitted late. It was really nice having to share ideas by commenting on someones wiki. This really helped in producing a quality assignment and it is as if we were working as a group not individually. A wiki gave me an experience of easy communication and a sense of team work. Since we were able to see each others wiki's it was easy to be able to come up with a new idea and editing the wiki was quick and easy. It was really interesting and nice to experience and see comments by other students on an assignment because, if the assignment was to be done in another format, we couldnt have got this experience. I found the blog as a new way of communicating with a group and building a sense of team cooperation amongst the individuals. The wiki for me was really fun and interesting and I would not mind if other assignments in other modules would do the same for submission of assignments

Reply

42.

[redacted] October 22, 2014 at 11:50 AM

I am not a huge fan when it comes to blogging and this was the first assignment i had to complete online, that is why i found this experience quite challenging. I found it very difficult to write my wiki as I had some technical difficulties in to put on some content which was deleted over and over. However, as time went on, my wiki came along, but I still do not have the have of it 100% just yet, but I accepted the challenge and worked day in day out and eventually finished. A lot of confusion came with the wiki assignment, but after hours of grinding i had fun once i started getting hang of it. A lot of information about the person I was writing about came with this assignment and i learned a lot of about the sport and how I could use some of these information in my own sport. Initially I did not enjoy it as much, because I struggled to much. I do not blog or and I think people who do not enjoy public speaking as much use these internet tools and express their view on different aspects. Blogging have the ability to be rewarding as you can learn a lot from those people who does not speak that well in public. People who enjoy writing can also benefit from these type of skills, but I have no mastered that skill quite yet

Reply

43.

[redacted] 22, 2014 at 12:30 PM

My experience with the wiki assignment turned out to be a positive one. At first, like with all assignments, I was not keen to get started and left it all to the last minute. My theory is that the later I start on my work, the older I will be and therefore wiser because with age comes wisdom. Haha.

Throughout this assignment I kept wondering what the point of it was and why could we not just type it up and print it out as we do with all other assignments. But now looking back, I realise that this is in fact a quicker and easier, as well as a safer way (regarding the environment) of doing university assignments.

One of the positive points about this wiki assignment is that I was given the chance to get to know one of my classmates in a more in depth manner than before. In fact, I got to know a lot of my classmates in a deeper manner due to the fact that the wiki space was open to the public. The one negative though is that my work was vulnerable and open to anyone who wanted to edit it and possibly remove or alter my information. Luckily though, I did not have the misfortune to experience something like that, it remained just a possibility. Maybe it could be an improvement if the admin could in fact lock their work but still have it public enough to view.

Being able to view my fellow classmates work was in fact a plus. I say this because by reading theirs, it helped me to better understand what was being asked of me to do. The possible downside of this option is plagiarism.

It was nice that I could incorporate pictures and videos. Hyperlinks were cool to work with as well. I found it quite easy to do.

The fact that wiki space is online is a great plus as it is less time consuming for someone like me who spends a lot of the time on the internet. Concerning the interview process of this assignment, unlike others who made appointments with their athletes, the person who I interviewed and I corresponded via email. It was less time consuming and if I had any queries, all I needed to do was to email him.

Another aspect that saved time is the fact that this assignment did not require me to print, it is also environmentally friendly as it did not require the use of paper.

I quite like the fact that Sports Psychology as a module is moving with the times of technology and making use of the resources available. Although, there are still those who do not have access to internet at home, there is internet available at campus. For someone like myself, who spend copious amounts of time on the internet, it made my life easier.

Reply

44.

[redacted] SteynOctober 22, 2014 at 1:08 PM

When I found out about the wiki assignment I was not entirely sure why we could not just type the assignment out and print it like every other assignment. Throughout my experience of completing the assignment I was extremely frustrated because I was not always able to access the wiki site and I had quite a few technical difficulties which I feel prohibited me from properly performing the set assignment. This was very frustrating experience for me and I honestly did not enjoy this assignment.

I also was a bit afraid of expressing my views at one point as I have never done an assignment like the wiki one before. I was not entirely sure on how I was supposed to go about the assignment and make it my own. The fact that it was so open as well put me off because I generally do not like other people seeing my work, except lecturers of course. Once I saw more and more student's assignments I felt more comfortable submitting my work for other students to see and comment on.

On a more positive note though, I recognise what Miss Titus was trying to achieve when setting out the assignment. It was another site within which students are able to learn and communicate with one another. It was definitely interesting reading about my fellow classmates, learning about people I have never even spoken too and recognising their passions and what drives them.

The wiki site is a great tool for people to express how they feel and connect with other people of similar interests. It is a space to share ideas and help other people. I would definitely consider using the wiki spaces again in the future and also making better use of it the next time and introducing more people on more ways to interact with other people in a social and comfortable environment.

Reply

45.

[redacted]October 22, 2014 at 1:10 PM

I was interested from the first Sport Psychology class because we were told that we would be blogging and playing games as well as creating a wiki page for someone in our class. i was excited and interested because this was all so new to me.

The wiki assignment felt very tedious at first because i honestly had no idea what to do. i got advice from classmates and tutors and then i had a better idea. i got to work on it and it was actually interesting getting to know a fellow classmate. what i found most interesting was the psychological tools that some people used that i actually tried some for myself before a football match.

It was a good experience doing this assignment because it taught me more computer skills than i had accumulated during computers in first year. I did not like that anyone could edit my work. i feel the website could be altered that if one were to log in, only they can edit their own page. just for future reference. At the end of it all, i did enjoy it. Reading some peoples pages was really insightful. I hope you put it back up so we could continue reading those that we were unable to read.

I'm not a fan of blogging though. i understand that we do not have much time in class but i would much prefer in class discussions. I feel as we are too reliant on technology and that we use technology as the first option. Can we really call that interacting? I'm sure blogging can be very useful for different things, but in my opinion, for this module, i would have preferred in class discussions.

Reply

46.

[redacted]October 22, 2014 at 1:33 PM

When I first heard that we were doing a wiki assignment, I felt a bit sceptical about it. Firstly because it was an online assignment and I have never done an essay assignment in this form before so I felt a bit weird about it and secondly because we were required to interview someone in our class. I felt like this was going to be the biggest struggle for me because I haven't played a sport in so long and if someone wanted to interview then my fear was that I would not have much to say and this person's assignment wouldn't be "up to scratch", and also, I thought that the fact that I had to interview someone only from the class would be weird because I didn't know what I would ask them and if their sports career would be enough to make my assignment "up to scratch" as well.

My partner [redacted], made it very easy for me to create a good assignment because she was very helpful and continued to give information and pictures regarding her sports history. For me this was very important because I tend to be a perfectionist when it comes to getting my work done and to a certain standard.

This assignment also help me learn not only a lot more about Kirsten but about myself as well. With Kirsten, I never knew that she was part of her primary school's athletics team and that she was so good at – and really loved to play – hockey. I knew that she played soccer, but I had no idea that she participated in – and won – a female futsal tournament, which is really a great accomplishment.

What I learnt about myself was that I actually did have an interesting (enough) sporting career thus far. Because it was my first time really reflecting on my accomplishments, my dancing has been really successful and that maybe taking a break this year wasn't such a great idea – although it has given me time to focus on my studies.

Another positive this about this assignment was the fact that I didn't have to stress about going to print it and hand it in as well as that fact that I could just go online and edit what I wanted to change and improve what needed to be improved.

The thing that that I didn't like was the uploading of pictures and videos because I missed the class where it was explained so I had I figure out how to do it on my own, which took up a bit of time

I would definitely do a wiki assignment again because it is more convenient and easier to do than a conventional assignment that has to be typed and printed and reprinted if there are any mistakes or add-ins that I want to make. It also makes it seem like we are moving forward with the technological generation and this automatically makes the assignment seem more interesting to do.

Reply

47.

[redacted] October 22, 2014 at 1:45 PM

The wiki assignment was a great learning opportunity. This module was made fun and I enjoyed everything about it. The module showed us that we can get out of the books and up and going with technology. The wiki was a great idea for an assignment.

The assignment forced me to mingle and work with other students out of my comfort zone. I really liked doing that because it made me more aware of the wide variety of classmates I have. Our assignments really reflected on our personalities. This showed me more about the students in my class and their background in sports.

Implementing the theory was the challenging part. It was hard to compare what the theories said to the sporting career of one of my classmates. Later in the assignment it made more sense and the theory became more understandable. I could implement the theory better after understanding it.

The assignment was not at all time consuming as we could do it any time anywhere. This made it helpful to work on it at campus because we have access to free wi fi and we can go sit in computer lab and work on it. It is very economical as well because we did not have to print it out.

I enjoyed the wiki assignment a lot it was a fun way for me of doing an assignment. Another great thing is that we could cooperate with the person your doing the assignment on without having to travel to them.

The one thing that bothered me a lot was that anyone could edit on my wiki. That created a lot of problems and frustrations as some of my pictures was changed as well as my information. But when that was sorted out I dis not have any other problems.

A challenging thing was to put the questionnaire into a paragraph. The information on the person I did my assignment was hard to work with because their was not a lot of information that he gave me.

This was a challenging but fun assignment and I would enjoy to do it any time again. The way this was done should implemented more into our department.

Reply

48.

[redacted] October 22, 2014 at 1:55 PM

When i first heard about this assignment i had a very negative attitude towards it due to the fact that my computer knowledge is very low. In the begginig i struggled to log in and i had to ask Miss Titus to reinvite me. When i wanted to get started i didnt even know where or how to start so i asked for assistance from some of my class peers. They were of great help and gave me a better understanding,i enjoyed the fact that we were able to communicate to eachother help and suggest eachother on one anothers work,it really worked for me because im personally a shy person therefore i would rather Write my comments than say them to anyone, I learnt alot about my class mates through reading through the portfolios and it was so much fun doing my wiki assignment. I would say i enjoyed doing the wiki but granted the chance of me doing it again i would refuse unless it was for marks because my computer knowledge still sucks

Reply

[redacted]

[redacted] October 22, 2014 at 1:57 PM

When I heard about the wiki assignment, I had a slight idea of what was needed to be done but was a bit skeptical about what the purpose of the assignment was. I thought we just had to create a bibliography on a fellow student and bobs your uncle, but when I eventually found out that it had to be done on a wiki page itself it made me a bit anxious because I was not sure how it ought to be done then and I was unfamiliar with the tools on the web page.

At first I found the assignment “boring” but when I started gaining knowledge about it was supposed to be done and how to add hyperlinks and videos on a blog post it made it very exciting and fun. Learning all these new skills helped to become more technologically skillful and it was extremely educational. Why I say it was educational was because in my assignment I had to use tools that i learnt in lectures, so this helps me basically revise my work as I used many tools and skills learnt in class and lectures to compile my assignment.

I really liked the fact that I had to compile a whole life story about someone and put it on a single page. Looking at my task it felt rewarding as I couldn’t believe that I learnt so much in this course. What I disliked about this assignment was the fact that people could edit ones work but nevertheless this was a very fun but educational way of learning.

Reply

50.

[redacted] October 22, 2014 at 2:55 PM

I have really learnt a lot during this assignment . I had never done anything like a blog before hence at first I had a couple of challenges and one of them was self belief , as to weather I will manage to do what is expected of my in the assignment. It was also very rare for me to work with the wiki page more especially since I have never done so in my time at this University.

However I must state that I was so much better for me when I saw the example which we could follow. After panicking so much at first I really never looked back as I started to get the hang of the assignment and what was expected from me . I really enjoyed a lot about the blogging from the interview to the structure of my profile it was really exciting to see the final product. my biggest highlight was to see what my interviewer had gather after I had an interview with him , this certainly made me feel like a super star in the making .

I also had a challenge when it comes to making my assignment as professional as I could even though keletso Morobe is not a professional super star yet , I still had to structure my assignment in a way that would be attractive for anyone who does not know him .

I really had so much fun when I had to read what others had done it really made it even more interesting to hear the comments of what others had to say. I really like this way of studying it makes it very interesting for us as student to know that we can learn skills that we can use in the future. I can also state without a doubt that blog was my favourite part of what I learnt during sports psychology. I am really looking forward to using this skill in the future in my work place and teaching other relevant people in my life . Even though it is not easy but it is very challenging when you first get introduced in blogging but the reward is greater than all the issues.

I will certainly love to see blog been part of sports psychology moving forward because I believe that it is the latest way of doing things especially in the first world countries. I had so much fun and enjoyment as I was attaching my videos because of the understanding that nothing is impossible and I should never fear doing a new skill.

Inclusion I really like blog it is very fresh , exciting, interesting and it bring so much enjoyment hence I will always value this opportunity of learning a skill that will help me so much in the future.

Reply

51.

[redacted] October 22, 2014 at 4:53 PM

Ive lost 2 blogs like this and is the 3rd time I have started.

When I heard that the assignment was a blog, I was excited to start.I have not done anything like this before and I had always wanted to blog, this would be a good platform to learn.

At first I struggled to log in as did most students but I started on a word document instead.

after I had gathered all of my information, checked the assignment details and seeked inspiration from other students who had already began, I struggled to expand on the notes I had because my subject was not as serious about his sport as the others. I felt a bit limited in that regard.

using hyper links wasa bit tedious and seemed inappropriate in my assignment however it was a skill learned and it helped for a deeper research of the necessary information.

I regularly read blogs of my interests and I always note how open minded and freely expressive the bloggers are and this is what made me excited to start. obviously that this was an assignment and had a structure to it I struggled a bit creatively but the idea of a blog for an assignment is fresh and moving with the modern times.

I really admire the effort of new approaches to students in sport psychology. I think it is effective and will be key in the future.

Reply

52.

[redacted] October 23, 2014 at 1:11 AM

Experience using wiki

My experience using wiki and blog as a platform of learning was a totally new and rewarding experience. I enjoyed how interactive and fun this made learning and teaching, I thought it was very forward thinking of the department to introduce this type of learning to students. At first I must

admit I was a bit apprehensive because for starters I had never used such platforms and when I had difficulties logging in and finding someone to interview I was ready to admit defeat and throw in the towel, but seeing others doing the wikis encouraged me to go on.

Writing the actual wiki was not that difficult because the example of last year's wiki was really helpful and I often used it as point of reference. I don't see this as copying or anything but I sometimes found myself browsing to other peoples wiki to find how they were going about their wiki, there were some that were amazing and I enjoyed reading and giving advice on. I appreciated how others could advise me on how to improve some aspects of my wiki but I did not like the fact that people I did not really know could be able read up on me, but I guess one of the purposes of the wiki was so that we can get to know one another.

What I did not like even more about the wiki and didn't find reason for, was why we could not interview someone outside of class, because not the people in class participate in sport one person was interviewed more than once and the whole wiki thing lacked variety. I thought it would save me time and airtime to first write the wiki on word and just copy and paste it, but the opposite happen because I could not copy it I wasted time rewriting it on the actual wiki page and I often made the mistake forgetting to save and losing all my work.

I appreciated the whole experience even with its challenges because I believe we here to learn new things and develop new skills, but I still like the traditional way of writing assignment and submitting them on hard paper much better.

Reply

53.

[redacted] October 23, 2014 at 2:00 AM

Hearing about doing a wiki on someone and interviewing them for me was the fun part and collecting pictures etc. as I love interacting and learning new things about people as well as life with it's challenges and sport. The wiki itself was having issues with me as I couldn't log in even after contacting the admin twice but third time's a charm and I then had no problem logging in. By that time though I was pressed for time and had to now work as quickly as possible which was fine because I work well under pressure. Starting the wiki was easy as I love using technology so it came across nicely however, not having internet access at home was the biggest challenge as I could not always edit my work and add youtube clips etc. Another bad thing about the wiki was that the way you lay it out in edit mode is completely different to when you go to preview mode and I constantly had to move back and forth between the modes which was frustrating but I managed to do what I wanted, with great difficulty I might add. The wiki took so much time to complete but in the end, everything worked out well. The fun things about the assignment was getting to know more about the specific sports and getting to know the person on a better level as I too am sporty and can now grasp concepts I never knew of before.

The blog writing all in all was fun yes and I loved it but again, online assignments are time consuming and gaining access to the internet all the time was a problem. I wished it could have been a hand in assignment instead as that would have made everyone at ease without stressing about problems logging in and all the other technical blunders. The assignment definitely makes a person think out of the box and tests their creativity skills as you need to do research on what needs to be in a blog, the format and flow of things and then also adding your own extra elements to make it unique and stand out. I loved doing the research and then getting pictures not only of the person playing sports they did but also some exercise tips and things to that effect. Sure was fun and I am glad it is now over.

Reply

54.

[redacted] October 23, 2014 at 3:18 AM

When i found out that we would have to do a blog about one of our classmates i thought to myself "what is a blog" i have never done a blog before and i did not know what "Wiki" was,so naturally i was very nervous about it. But it was surprisingly fun and simple. I enjoyed the fact that we could chose who we wanted to do i blog about and that we where not given someone to do it on. reading through some of the blogs i found out some stuff about people that i never knew. This blog has opened my eyes to the potential of the internet and the was it can be used educationally in a fun and simply way that still tests the ability of the students. The wiki was surprisingly easy to do and i think all the students that did it will agree with me. In my opinion it is so much easier doing an assignment on line or doing it on a computer because you can be more accurate and it is a lot faster. I found it challenging to post comments some of the times because i did not understand what to do, but now that i know i will most defiantly do it again. the wiki was very easy to understand and very easy to do and i really liked that. it was simple and fun and very enjoyable. I would recommend that all students at uwc do an assignment like this because it will open there eyes to the possibility of the internet as this assignment has did for me. The internet is a great tool that i know will help the education world a lot , it is simple, effective and reliable. Another challenge i found while doing this assignment was that sometimes i could not log in to the wiki or sometimes i did not have internet access at my house so i would have to travel to campus or go to one of my friends houses who had internet. My friends got fed up with me coming to their houses to use their wifi so i would have to come up with excuses to say why this is the last time and that i will buy them something for their help. As mentioned before i really enjoyed this wiki assignment it helped me learn about the internet and helped me learn new things about some of my friends, things i did not yet know about them. i hope that one day in the near future all the assignments we do will be based online like the wiki because i feel if it is like that, people would do much better in university. This wiki assignment is a step in the right direction for education and i really cannot wait to see what the education system looks like 3-5 years from now, it is a very exciting prospect, one that i know will change not education but also the way we live.

Reply

55.

[redacted] October 23, 2014 at 3:41 AM

The wiki assignment was a fun and interactive way to share information about this course. The assignment itself was quite fun because we got to act as real sport psychologists. The downfall about

this was that logging in was a bit of a challenge and it was unorganized due to the fact that we had to jump from e-mail to e-mail to get the link then password .

Overall the wiki took quite a few hours to finish because I didn't know how to use the wiki. But after i got the hang of it i really started getting in to the whole online class interaction idea because it saves travelling to campus and i could edit my wiki assignment virtually anywhere. The wiki assignment was a good idea but the way it was introduced was not quite easy.

The blogging , games as well as the wiki assignment , made the course interesting , because the education system is improving and in a few years from now who knows what our children will be using as a educational outlet or source.

Working with Che, made me get to know him better as a friend as well as teammate . It was quite interesting to interview him and hear about his background and do research on him. Che is a huge All Blacks fan which I never really knew and he aspires to be like Sonny Bill Williams .

In my opinion online assignments are fun but also time consuming and it was a bit of a hassle to upload media onto the assignment. I am not one for blogging though but the experience was fun and might come in handy in the future . Grasping the whole sport psychologist idea and advising a "client" was fun as I aspire to be a sport psychologist one day.

The theory part of the assignment was not challenging at all and was fun to say the least. But I think the whole online assignment is not a good idea because a hard copy would've been less time consuming and more organised . The idea of blogging is not everyone's idea of interacting with one another as the older method would be much more easier and efficient to lay out their ideas and opinions.

Learning about new ways to interact is a good idea yes but not if it is against your will . I think that we should have had a choice between a blog and hard copy because then everyone would be comfortable doing the assignment . The research part was quite intriguing and adding your own sources to make the assignment to your own personal format was quite fun because we could lay out ideas and be creative.

Learning new things like the wiki is a good thing but not everyone has access to internet at home and some people stayed till late on campus to do their assignments. That is why a hard copy would be ideal . In conclusion I would say that the whole concept of blogging was a good idea but the old fashioned way would've been better.

Reply

56.

[redacted] October 23, 2014 at 3:42 AM

it was a bit of a shock to me at first , finding out that we had to interview someone and kind of create some kind of a profile of someone and post it on the net was the challenging part for me. I am not the smartest person when it comes to computers and doing these fancy things with them. the wiki assignment helped me overcome my dumbness with computers . this assignment was fun im not gona lie and say it was a waste of time. it allowed me to get to know my mate (Bubbles), the person i was interviewing. it was fun getting to know about his history of injuries and how he managed to cope with them and how he kept strong mentally during the time of the injuries and rehab.he also explained to me how he sees things and how he uses negative feed back to improve his footy (rugby). the collection of pictures and posting videos was the part which i looked forward too most. this is because it will be part of my future career in sport ... helping other aspiring athletes that have the same dream of becoming a professional sportsmen . the internet is one of the most used tools in the sporting world may it be for loading highlights of the weekends games or posting a pick me video to clubs all around the world and hoping that they will get spotted and signed by one of the clubs. the challenges of this wiki assignment was the log in part and understanding how to put it all together it took bubbles and i like round about 2 days to finally figure out how we had to structure and the how the layout should look like.looking and reviewing all the other peoples wiki assignments also helped in that regard as we could see how each one lade out their assignments.the internet was also a challenge , staying on rez you can never have consistent connection. so it was very time consuming but we stuck it through to the end and managed to finish. the entire assignment was fun it was different from all the other assignments that the other subjects made us do. different is not always better but in this case it was.I will certainly love to see blog been part of sports psychology moving forward because I believe that it is the latest way of doing things especially in the first world countries. I had so much fun and enjoyment as I was attaching my videos because of the understanding that nothing is impossible and I should never fear doing a new skill.

Inclusion I really think that this blog was a very fresh , exciting, interesting idea and it bring so much enjoyment hence I will always value this opportunity of learning a skill that will help me so much in the future. thank you

Reply

57.

[redacted] October 23, 2014 at 4:44 AM

I believe the wiki assignment was unique in its own way because the assignment can be done anywhere and be handed in anywhere. It was not your typical assignment which needs to be handed

in at a particular venue. The ability of students to view other student's projects before the project was actually handed in can be said to be a positive and negative attribute. Regardless of all the other different tools that the assignment required such as hyperlinks, additional video's, etc. I believe the major difference to this assignment compared to normal assignments I did in the past was the fact that students could view their class mate's assignments before-hand.

What are the positive features of the assignment?

Well, before I even started on the project I was capable of viewing my class member's assignments and this made it easier to start the assignment and gave me a better idea on what is required from me. It also gave me various ideas that I wouldn't have thought of. Another positive was the fact that class mates can give you advice on your project by commenting on it. This really helped in tweaking my project and making it better. I also enjoyed the fact it wasn't your typical assignment where you have to hand it in on A4 pages, therefore it was possible to add video's and made my assignment feel more creative. This feature made it exciting when reviewing other people's assignments. It wasn't dell and boring looking compared to the usual assignments. I also feel that hyperlinks were an awesome invention because it helped me understand words I did not know when viewing other people's assignments and did not require me to search the meaning of certain words that I did not understand. Therefore the overall assignment made it easier to read for the viewer as well as much more exciting.

What are the negative features of the assignment?

As I mentioned that the ability to view other students assignment to be a positive attribute and that it made it easier for me to start my assignment and gave me a better understanding on what to do, it also comes with a negative attribute which is plagiarism. Many students could have just copied and pasted parts from other students assignments and claim it's there's. The can use the exact same ideas by just tweaking it a bit and this could get them better marks by the hard work of others. Therefore, there is a slight unfair element to the assignment. Normally this shouldn't really be a problem for students, but for lectures it could be a problem. Another factor which can be said to be negative is that the project required internet and not every student has internet or has a modem that works sufficiently. Some students might not have wifi at home and therefore they were required to go to the internet café. Therefore, for some students it made their lives easier whilst for others it made their lives more difficult. So one of the main negatives for me is that it had an element of unfairness, but then again nothing is fair in life and we just have to adapt to whatever comes our way.

Reply

58.

[redacted] October 23, 2014 at 11:37 PM

The main purpose of reflection is to emphasis my thoughts and opinions of my web page assignment. My web page was based on one of my class mates whom is a track athlete by profession. He was very easy to work with and an individual, who is hard working, determined and truly an admirable character both on and off the track.

Details and due dates of the assignment was brought forward in the second week of semester two. At the beginning I was excited and looking forward to the final product of my assignment. It was going to be a good platform for me to learn how to set up and activate a web page, something I was always interested in doing. What involves my interest in sport and learning more about my classmates was very exciting. Upon reading my peers blogs I was pleasantly surprised by the sporting codes and competitive levels of my fellow peers.

I do however think we did not receive enough direction and support from our lecturer or tutors, mainly because I had to figure out most of the logistics, despite being unsure if I was doing the right thing. It was not after reading blogs from my peers did I gain a full understanding of what was required of me to do.

The assignment itself was on extension of our personalities because we could include anything we felt fit the plot of our blog's and the individual we were reporting on. I liked the fact that we could add hyperlinks, video's and pictures to our blog to help explain and motivate our statements and feedback. It was exciting to see your work come together.

It was an online assignment which to an extent had its advantages and disadvantages because I get to do it in my own time whilst processing my thought constructively. Although it was challenging sometime because I do not have direct internet access at home. So should I wanted to work at night at home or had an idea I wanted to act on, I had to record it on paper instead which by the next day I would have lost my train of thought and could not update my blog at the present time. It was difficult because the best signal on campus is at Gym B and in the smaller tut rooms in the great Hall building. At times it got challenging to find suitable times to work on my blog because these venue's would either be occupied by other scheduled classes as soon as I begin to get my creative thought process flawing to update my blog.

Overall the assignment was a challenging and exciting one, very different from all other assignment was a different and exciting one, very different from all other assignments that I had done before, I in fact never did a web page nor draw up one on order to be marked as an assignment.